### **Student Learning Assessment Committee**



## ANNUAL REPORT 2010-2011

October 2011

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### STUDENT LEARNING ASSESSMENT COMMITTEE

This report is a summary of the activities of the Student Learning Assessment Committee (SLAC) from June 2010 to May 2011.

### **COMMITTEE COMPOSITION**

During the 2010-2011 academic year, the Student Learning Assessment Committee (SLAC) consisted of the following members:

Tom Morris Chair, Health and Wellness Facility

Coordinator/Faculty

Dr. John Bauler Coordinator of Off-Campus Programs

Donna Garcia Director of Academic Affairs
Sabrina Gaskill English/Communications Faculty

Natalie Gillard Dean of Academic Affairs
Janet Griffiths Pre-Collegiate Faculty

Dr. Axel Hungerbuehler Museum Curator/Natural Sciences Faculty
Dr. Philip Kaatz Mathematics/Physical Science Faculty

Kim Enriquez Committee Secretary, Administrative Secretary,

Adjunct Faculty

#### **COMMITTEE OBJECTIVES**

The Student Learning Assessment Committee has four explicit objectives that are stated in the *Student Learning Assessment Model*. The objectives of the Student Learning Assessment Committee are to:

- Objective 1 Enhance the knowledge of the faculty at Mesalands Community
  College about the assessment of student learning by conducting
  meetings and workshops, distributing materials, and by providing
  resources (e.g., Assessment Reserve Collection in the Library). All
  faculty will receive a copy of the Student Learning Assessment
  Guide for Faculty by the first week of classes. The Student
  Learning Assessment Committee will have at least one joint
  meeting with the Faculty Council every semester.
- Objective 2 Spearhead the development of assessment at the College by producing, if needed, by August of each year, a revised Student Learning Assessment Guide for Faculty.

- Objective 3 Facilitate and implement the development of feedback loops and information dissemination about assessment at the College by:
  - a. producing an annual report by October of each year
  - b. providing all faculty with copies of the Student Learning Assessment Guide for Faculty each academic year
  - c. having at least one joint meeting with the Faculty Council every fall and spring semester
  - e. providing all adjunct and new faculty with assessment-related training and an assessment mentor
  - f. presenting information on assessment at every new student orientation and at each section of ACS 100 Student College Success class, including delivery of the brochure Student Guide to Learning Assessment
  - g. conducting a semi-annual Assessment Day to be held every fall and spring semesters. The semi-annual Assessment Day is a joint meeting between the committee and all full-time faculty used to discuss, update, and refine the assessment practices at the College.
- Objective 4 Oversee the implementation of the Student Learning Assessment Model and Student Learning Assessment Guide for Faculty so that faculty and staff will provide all the documents and reports specified in the Model and Guide within one week of the stated deadline.

### STUDENT LEARNING ASSESSMENT COMMITTEE ACTIVITIES 2010-2011

The Student Learning Assessment Committee completed "Year Three" (2010-2011) of the Higher Learning Commission's "Academy for Assessment of Student Learning" by continuing to refine and implement its "Action Portfolio" (also referred to as the Student Learning Plan) entitled "Beyond the Basics: Reinventing Assessment at Mesalands Community College." This Student Learning Plan continues to address and build upon the findings of the 2004 Higher Learning Commission's on-site visit for accreditation, with emphasis on both program level assessment and general education competency outcomes. In order to continue this process, Mesalands Community College encourages program directors and faculty to take "ownership" of their respective programs, in terms of whether or not students are learning what faculty say they are learning as identified in the program objectives and general education competencies. Clearly defined program objectives and general education competencies are Mesalands' contract with all stakeholders and reflect those outcomes that students will possess and demonstrate upon graduation. These outcomes reflect knowledge, skills and professional dispositions valued by workplace employers and other parties. They also represent the most deeply held values of the College. As such, they drive much of what occurs at Mesalands.

The following assessment-related changes at the institutional-level, program-level, and course-level, were instituted during the 2010-2011 academic year:

- 1. The Student Learning Assessment Guide for Faculty, which is prepared for all full-time and adjunct faculty who teach both on-campus and off-campus programs at Mesalands Community College, was significantly revised. This practical guide to student learning assessment is a supplement to the Student Learning Assessment Model, which was also significantly revised. The Student Learning Assessment Guide for Faculty was distributed at the beginning of both the fall 2010 and spring 2011 semesters.
  - In the fall 2003 semester, the Student Learning Assessment Guide for Faculty (then know as the Faculty Assessment Notes) became an annual guide to assessing student learning at the College.
- 2. The Chair of the Committee visited the off-campus sites of Moriarty High School, Guadalupe County Correctional Facility and Northeast New Mexico Detention Facility for formal assessment-related training of adjunct faculty during the fall 2010 semester.
- 3. The Student Learning Assessment Committee held joint meetings with faculty in the fall 2010 and spring 2011semesters to discuss assessment practices and the evaluation procedures for the General Education competencies. These semi-annual "Assessment Day" meetings occurred on the following days:
  - August 17, 2010
  - January 14, 2011
  - April 15, 2011
- 4. The Committee continued to mentor all adjunct faculty and new full-time faculty in assessing student learning. As in previous semesters, all adjunct and new full-time faculty were assigned a mentor to assist them in assessing student learning each semester.
- Members of the Committee and other College administration and staff attended the annual New Mexico Higher Education Assessment and Retention Conference held in Albuquerque on February 24-25, 2011. The following committee members attended the conference: Sabrina Gaskill, Dr. Philip Kaatz, and Tom Morris.
- Course syllabi format was evaluated and significantly modified for all College courses.
- 7. Course objectives for all College courses were reviewed and, when necessary, rewritten to be measureable and include a performance, condition and criteria.

- 8. The end of semester *Mesalands Community College Faculty Outcome*Assessment Narrative Form was rewritten in order to capture more meaningful/useful assessment results.
- A capstone portfolio course to capture College-wide general education competency attainment was developed. This course will be required of all degree-seeking students beginning their course of study in the Fall of 2011.
- 10. Committee members, along with other faculty, participated in the College's Assessment Days when students completing 60 credit hours or those petitioning to graduate completed the General Education Assessment (GEA) and Collegiate Assessment of Academic Proficiency (CAAP) Exams.
- 11. Student Learning Assessment Program Reports were assessed using the Committee-developed Student Learning Assessment Program Report Evaluation Rubric. The Assessing Assessment Report was presented to program directors/lead faculty in order to give feedback on their assessment activities.
- 12. The Committee continually emphasized program assessment. Faculty received frequent email reminders concerning program assessment during the academic year. All program directors/lead faculty met one-on-one with the Chair of the Student Learning Assessment Committee to review assessment activities.
- 13. The Committee revisited, and when necessary, rewrote the following general education competencies:
  - Oral Presentation
  - Information Technology
  - Critical Thinking
- 14. The Committee developed reporting rubrics to collect data on the attainment of the general education competencies identified in #13.
- 15. The Committee developed and implemented an assessment plan for offsite learning, which included embedded assessment to determine whether the quality and quantity of learning is similar across different delivery methods (e.g., traditional classroom, Internet/Moodle, podcast, webcast/DVD/VHS, directed study, etc.) and different locations (e.g., main campus, dual enrollment sites, off-campus sites, etc.)
  - ENG 104 and MATH 110 courses were evaluated via embedded assessment during the Spring 2011 semester.

- 16. Lead faculty were identified for the following programs:
  - Pre-Nursing
  - Social Work
- 17. The following *General Education Competency Reporting Schedule* was implemented to assess general education competency attainment across all College educational sites and delivery modes.

Specific general education competencies are assessed and reported on each year with the goal of implementing and reviewing curricular adjustments to improve learning on a three year cycle.

Report Year	Academic Cycle	General Education Competencies Assessed
2016-2017	Summer 2016, Fall 2016, Spring 2017	Oral Presentation and Critical Thinking
2015-2016	Summer 2015, Fall 2015, Spring 2016	Writing
2014-2015	Summer 2014, Fall 2014, Spring 2015	Mathematical or Scientific Reasoning and Informational Technology
2013-2014	Summer 2013, Fall 2013, Spring 2014	Oral Presentation and Critical Thinking
2012-2013	Summer 2012, Fall 2012, Spring 2013	Writing
2011-2012	Summer 2011, Fall 2011, Spring 2012	Mathematical or Scientific Reasoning and Informational Technology
2010-2011	Summer 2010, Fall 2010, Spring 2011	Oral Presentation and Critical Thinking
2009-2010	Summer 2009, Fall 2009, Spring 2010	Writing

#### COMMITTEE SELF-EDUCATION

In addition to attending the New Mexico Higher Education Assessment and Retention Conference in February, the Student Learning Assessment Committee continued its ongoing self-education process during the fall 2010 and spring 2011 semesters. Ms. Gillard and Mr. Morris, members of the committee, attended the North Central Accreditation Annual Conference in Chicago, Illinois, on April 9-12, 2011.

### STUDENT LEARNING ASSESSMENT COMMITTEE GOALS 2011–2012

Student learning assessment is a living, breathing process that will mature and change as the College identifies the most effective and efficient methods of understanding, confirming and improving student learning. The 2011-2012 goals and objectives associated with this process are specific, measureable, attainable and relevant to those areas identified by the Higher Learning Commission's Accreditation Team during their Comprehensive Evaluation visit to Mesalands Community College.

Priorities	Goals	Objectives	Responsible Individual(s)
Continue assessment- related changes based on the Higher Learning Commission's Academy for	Complete "Year Four" (2011- 2012) of the Higher Learning Commission's Academy for Assessment of	Revisit and, if necessary, rewrite Mathematical Reasoning and Scientific Reasoning general education competencies and associated rubrics.	Student Learning Assessment Committee, Science and Math Faculty
Assessment of Student Learning Action Portfolio/Student Learning Plan "Beyond the	Student Learning.	Fully implement the General Education Competency Reporting Schedule across all delivery sites and delivery modes.	Student Learning Assessment Committee and full-time and adjunct faculty.
Basics: Reinventing Assessment at Mesalands Community		3. Implement ENG 299: Portfolio Capstone Course to capture general education competency attainment of students prior to their graduating with a degree	Student Learning Assessment Committee and shareholders.
College."		4. Establish embedded assessment process in order to determine if the quality and quantity of student learning is similar across different educational sites and delivery methods.	Student Learning Assessment Committee and full-time and adjunct faculty.
		5. Improve quality of Student Learning Assessment Program Reports as measured by the Student Learning Assessment Program Report Evaluation Rubric.	Student Learning Assessment Committee and Program Directors/Lead Faculty
		6. Activate links on the "Learning Assessment and Retention" on the College's website www.mesalands.edu.	Student Learning Assessment Committee and Coordinator of Institutional Computing.

### INSTITUTIONAL LEVEL ASSESSMENT

Direct measures of student learning assessment at the institutional level include, but are not limited to: COMPASS, CAAP and GEA testing, embedded assessments, and general education competency assessments based on the *General Education Competency Reporting Schedule*. Indirect measures of student learning include a number of student surveys. The following sections describe and summarize the results of these assessments.

### **Computer Adaptive Placement Assessment and Support System** (COMPASS)

The COMPASS test is a comprehensive software and operational support package developed by ACT to help post-secondary institutions place students into appropriate entry-level courses and to diagnose specific areas of strengths and weaknesses. Compass software administers, scores, and reports the results of adaptive placement and diagnostic tests in the areas of mathematics, reading, and writing skills.

The following tables show the number of students who completed each of the COMPASS sub-tests, their averages, and standard deviation for each sub-test completed in preparation for the 2010-2011 academic year (April 30, 2010–March 30, 2011). The summer testing period was from April 30, 2010 – June 30, 2010, the fall testing period from July 1, 2010 – Oct 31, 2010, and the spring testing period from Nov 1, 2010 – Mar 30, 2011.

	COMPASS SCORE SUMMARY									
	2010-2011 ACADEMIC YEAR									
	Pre- Algebra	Algebra	College Algebra	Trigonometry	Reading	Writing				
	Summer 2010									
Ν	17	38	2		26	27				
М	37.76	35.97	50.50		76	55.4				
SD	11.98	17.85	19.09		16.9	30.6				
			Fall 2010							
N	135	229	4	3	391	294				
М	39.7	26.9	50.7	30.7	75.5	59.7				
SD	16.3	13.7	14.9	10.7	16.1	28.6				
	Spring 2011									
N	45	59	1	1	61	54				
М	39.8	23.3	65	25	74.5	56.9				
SD	16.3	12.3			18.5	31.1				

N=number of students tested; M=mean (average score); SD=standard deviation

The following table displays the numbers of students that were placed in each course level for each semester of this report:

MESALANDS COMMUNITY COLLEGE COMPASS DISTRIBUTION SUMMARY 2010-2011 ACADEMIC YEAR								
COURSE	ABE	099/100	101/102	107	110	112	None	
			Summer	2010				
Math	2	10	14	10	1	1		
English	4	15	8					
Reading		14					12	
			Fall 20	10				
Math	20	69	122	14	1	3		
English	26	148	120					
Reading		202					189	
	Spring 2010							
Math	6	24	26	2		1		
English	7	26	21					
Reading		30					31	

Over the past 6 years, the percentage of students needing remedial reading classes has decreased slightly to about 52%, while the percentages of students needing remedial English (ABE, ENG 99/100) and remedial Math (ABE, MATH 99/100/101) has remained fairly constant at about 62% and 88%, respectively.

MESALANDS COMMUNITY COLLEGE PERCENTAGE OF STUDENTS NEEDING REMEDIATION 2005-2011 ACADEMIC YEARS						
2005-06 2006-07 2007-08 2008-09 2009-10 2010-11						
Math	86.7	88.3	89.0	87.5	86.6	89.9
English	63.0	59.5	65.5	62.0	62.8	60.3
Reading	53.4	64.5	59.9	58.3	52.9	51.5

### **Collegiate Assessment of Academic Proficiency Testing (CAAP)**

The CAAP test was administered to twelve students-all of whom had petitioned to graduate-on October 29, 2010, as well as to 49 students on April 1, 2011. These students had or would complete the required 60 hours of course work by their testing date. Students who have completed ENG 102 – English Composition are eligible to complete the writing and reading portions of the CAAP. Students who have completed a required science course with a laboratory are eligible to complete the science reasoning and critical thinking portions of the CAAP. Students who have completed Math 110 – College Algebra are eligible to take the math portion of the test.

Students who score above the 50<sup>th</sup> percentile nationally in any subject are awarded certificates of achievement from ACT. The following tables summarize these achievement results:

MESALANDS COMMUNITY COLLEGE CAAP CERTIFICATE AWARDS BY SUBJECT FALL 2010 AND SPRING 2011 SEMESTERS									
	Writing Math Reading Critical Science								
Number of Certificates Awarded	22	15	29	25	27				
Number of Students Participating	Number of Students         61         19         61         60         60								

MESALANDS COMMUNITY COLLEGE NUMBER OF STUDENTS RECEIVING CAAP CERTIFICATE AWARDS BY NUMBER OF SUB-TESTS FALL 2010 AND SPRING 2011 SEMESTERS							
Number of Students Participating	Number of StudentsTotal Sub-Number of CertificatesFive Sub-Four Sub-Three Sub-Two 						
61	261	118	7	11	5	8	8

The CAAP results for the fall 2010 students were too small for ACT to complete a statistical analysis; however, the spring 2011 averages for each subject area compared to the corresponding national average are given in the following table:

MESALANDS COMMUNITY COLLEGE CAAP AVERAGES BY SUBJECT AREA SPRING 2011 SEMESTER						
Subject	Writing	Math	Reading	Critical Thinking	Science Reasoning	
MCC Avg.	60.5	56.9	59.3	59.5	58.2	
National Avg.	61.8	56.1	60.3	60.7	59.1	

Generally, the CAAP scores of Mesalands Community College students have been stable in comparison with national averages. The following table displays the comparative results of the CAAP Test for the years 2002 through 2011.

	CHANGES IN CAAP SCORES 2002–2011									
Mesalands		1		ı	Yea	ar		ı	ı	
Community College Mean Score as % of National Mean	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Writing	95.40	94.88	95.04	96.47	97.27	96.30	95.65	95.65	96.77	97.90
Math	103.2	99.82	102.1	99.47	98.25	99.82	96.98	103.2	102.4	101.4
Reading	98.36	95.40	94.88	97.35	95.70	97.85	97.35	99.00	98.51	98.34
Critical Thinking	96.90	94.07	98.02	98.84	95.22	97.04	97.05	95.89	97.03	98.02
Science Reasoning	99.50	95.93	97.80	97.95	97.97	97.29	98.65	97.47	100.2	98.48

### **General Education Assessment (GEA)**

Twelve students who petitioned to graduate took the General Education Assessment on October 28, 2010, as well as 44 students on March 31, 2011. This assessment is completed for all graduates of the A.A. and A.A.S degrees awarded by the College. It was administered for the first time to the spring 2005 graduating class. The rubrics for this assessment are given in Appendix B. Note that the rubrics for assessing oral and written communication were revised during the fall 2009 semester. The critical thinking rubric was revised during the Fall 2010 semester and used in the Spring 2011 semester. The remaining rubrics are scheduled for review and possible revision during the Fall 2011 semester. A summary of the results-in terms of the number of students that scored at various levels and the group averages-are given in the following tables:

### MESALANDS COMMUNITY COLLEGE GENERAL EDUCATION ASSESSMENT Fall 2010 SEMESTER

	I all 2010 SLIVILS							
Criteria		Excellent 4	Proficient 3	Adequate 2	Inadequate 1	Total	Average	%≥2
CE1-1		1 (9.1%)	9 (81.8%)	0 (0%)	1 (9.1%)	11	2.91	90.91
CE1-2		0 (0%)	8 (72.7%)	2 (18.2%)	1 (9.1%)	11	2.64	90.91
CE1-3		1 (9.1%)	7 (63.6%)	2 (18.2%)	1 (9.1%)	11	2.73	90.91
CE1-4		2 (18.2%)	8 (72.7%)	1 (9.1%)	0 (0%)	11	3.09	100.00
CE1-5		1 (9.1%)	6 (54.5%)	2 (18.2%)	2 (18.2%)	11	2.55	81.82
CE2-1		0 (0%)	9 (75%)	3 (25%)	0 (0%)	12	2.75	100.00
CE2-2		0 (0%)	8 (66.7%)	3 (25%)	1 (8.3%)	12	2.58	91.67
CE2-3		0 (0%)	5 (41.7%)	3 (25%)	4 (33.3%)	12	2.08	66.67
CE2-4		2 (16.7%)	9 (75%)	1 (8.3%)	0 (0%)	12	3.08	100.00
	Excellent 5	Proficient 4	Acceptable 3	Inadequate 2	Unacceptable 1			%≥3
CE3-1	8 (72.7%)	1 (9.1%)	1 (9.1%)	0 (0%)	1 (9.1%)	11	4.36	90.91
CE3-2	7 (63.6%)	3 (27.3%)	1 (9.1%)	0 (0%)	0 (0%)	11	4.55	100.00
CE3-3	11 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	11	5.00	100.00
CE3-4	NA	NA	NA	NA	NA	12	NA	NA
SQ4-1	1 (8.3%)	1 (8.3%)	0 (0%)	4 (33.3%)	6 (50%)	12	1.92	16.67
SQ4-2	2 (16.7%)	2 (16.7%)	1 (8.3%)	3 (25%)	4 (33.3%)	12	2.58	41.67
SQ4-3	1 (8.3%)	0 (0%)	1 (8.3%)	3 (25%)	7 (58.3%)	12	1.75	16.67
SQ4-4	0 (0%)	0 (0%)	1 (8.3%)	0 (0%)	11 (91.7%)	12	1.17	8.33
SQ5-1	3 (27.3%)	3 (27.3%)	1 (9.1%)	2 (18.2%)	2 (18.2%)	11	3.27	63.64
SQ5-2	0 (0%)	4 (33.3%)	5 (41.7%)	2 (16.7%)	1 (8.3%)	12	3.00	75.00
SQ5-3	2 (18.2%)	2 (18.2%)	4 (36.4%)	2 (18.2%)	1 (9.1%)	11	3.18	72.73
SQ5-4	2 (18.2%)	3 (27.3%)	3 (27.3%)	1 (9.1%)	2 (18.2%)	11	3.18	72.73
SQ6-1	3 (25%)	8 (66.7%)	0 (0%)	1 (8.3%)	0 (0%)	12	4.08	91.67
SQ6-2	3 (25%)	5 (41.7%)	3 (25%)	1 (8.3%)	0 (0%)	12	3.83	91.67
SQ6-3	3 (25%)	4 (33.3%)	4 (33.3%)	1 (8.3%)	0 (0%)	12	3.75	91.67
SQ6-4	2 (16.7%)	2 (16.7%)	7 (58.3%)	1 (8.3%)	0 (0%)	12	3.42	91.67
CT7-1	1 (9.1%)	2 (18.2%)	4 (36.4%)	2 (18.2%)	2 (18.2%)	11	2.82	63.64
CT7-2	1 (9.1%)	3 (27.3%)	3 (27.3%)	2 (18.2%)	2 (18.2%)	11	2.91	63.64
CT7-3	2 (16.7%)	3 (25%)	2 (16.7%)	3 (25%)	2 (16.7%)	12	3.00	58.33
CT7-4	2 (18.2%)	3 (27.3%)	3 (27.3%)	3 (27.3%)	0 (0%)	11	3.36	72.73
CT8-1	0 (0%)	2 (15.4%)	9 (69.2%)	2 (15.4%)	0 (0%)	13	3.00	84.62
CT8-2	0 (0%)	4 (33.3%)	6 (50%)	1 (8.3%)	1 (8.3%)	12	3.08	83.33
CT8-3	0 (0%)	2 (16.7%)	8 (66.7%)	1 (8.3%)	1 (8.3%)	12	2.92	83.33
CT8-4	0 (0%)	2 (16.7%)	9 (75%)	1 (8.3%)	0 (0%)	12	3.08	91.67
CT9-1	0 (0%)	4 (36.4%)	6 (54.5%)	0 (0%)	1 (9.1%)	11	3.18	90.91
CT9-2	0 (0%)	3 (27.3%)	7 (63.6%)	1 (9.1%)	0 (0%)	11	3.18	90.91
CT9-3	0 (0%)	4 (36.4%)	5 (45.5%)	1 (9.1%)	1 (9.1%)	11	3.09	81.82
CT9-4	0 (0%)	4 (36.4%)	5 (45.5%)	1 (9.1%)	1 (9.1%)	11	3.09	81.82
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CE1-1	Provides an organized speech with an appropriate introduction and conclusion
CE1-2	Provides main points that are well documented and developed clearly and concisely
CE1-3	Uses appropriate gestures, movements and eye contact
CE1-4	Speaks clearly and understandably using standard, edited English
CE1-5	Provides appropriate handouts and audio-visual aids
CE2-1	Provides a clear, concise thesis statement
CE2-2	Provides supporting paragraphs which relate to the thesis
CE2-3	Correctly incorporates outside sources
CE2-4	Uses appropriate grammar, syntax, usage, punctuation, and spelling
CE3-1	Demonstrates basic computer and operating system skills
CE3-2	Performs core application Microsoft Office applications
CE3-3	Uses a search engine to access, navigate, and evaluate information on the internet
CE3-4	Uses email with appropriate etiquette
SQ4-1	Understands mathematical vocabulary
SQ4-2	Solves linear equations
SQ4-3	Graphs data and equations
SQ4-4	Understands polynomials
SQ5-1	Separation of observations (data) and interpretations
SQ5-2	Reasoning supported by using a variety of evidence
SQ5-3	Interpretation and analysis of results
SQ5-4	Distinguishes well-supported from poorly-supported scientific claims
SQ6-1	Problem is recognized and investigative question is formulated
SQ6-2	Reasonable, testable hypothesis is presented
SQ6-3	Prediction is formulated as logical consequence of the hypothesis
SQ6-4	Formulation of a conclusion
CT7-1	Analyzes and questions data validity
CT7-2	Does not allow bias to affect results
CT7-3	Interpretation and analysis of results
CT7-4	Distinguishes well-supported from poorly-supported scientific claims
CT8-1	Develops and evaluates conclusions from research
CT8-2	Develops and evaluates logical arguments within research
CT8-3	Comprehends and applies research data
CT8-4	Locates and applies research
CT9-1	Provides strong arguments
CT9-2	Identifies and presents issues
CT9-3	Conclusions justified by arguments
CT9-4	Evaluates and utilizes information

### MESALANDS COMMUNITY COLLEGE GENERAL EDUCATION ASSESSMENT SPRING 2011 SEMESTER

Criteria		Excellent 4	Proficient 3	Adequate 2	Inadequate 1	Total	Average	%≥2
CE1-1		4 (8.3%)	35 (72.9%)	8 (16.7%)	1 (2.1%)	48	2.89	97.92
CE1-2		6 (12.5%)	30 (62.5%)	10 (20.8%)	2 (4.2%)	48	2.86	95.83
CE1-3		7 (14.6%)	36 (75%)	4 (8.3%)	1 (2.1%)	48	3.00	97.92
CE1-4		11 (22.9%)	36 (75%)	1 (2.1%)	0 (0%)	48	3.22	100.00
CE1-5		1 (2.1%)	26 (54.2%)	9 (18.8%)	12 (25%)	48	2.35	75.00
CE2-1		8 (16%)	26 (52%)	16 (32%)	0 (0%)	50	2.84	100.00
CE2-2		13 (26%)	20 (40%)	17 (34%)	0 (0%)	50	3.00	100.00
CE2-3		2 (4%)	10 (20%)	14 (28%)	24 (48%)	50	1.87	52.00
CE2-4		5 (10%)	34 (68%)	11 (22%)	0 (0%)	50	2.92	100.00
	Excellent 5	Proficient 4	Acceptable 3	Inadequate 2	Unacceptable 1			%≥3
CE3-1	43 (89.6%)	2 (4.2%)	2 (4.2%)	1 (2.1%)	0 (0%)	48	4.84	97.92
CE3-2	31 (64.6%)	7 (14.6%)	6 (12.5%)	2 (4.2%)	2 (4.2%)	48	4.43	91.67
CE3-3	33 (68.8%)	0 (0%)	15 (31.3%)	0 (0%)	0 (0%)	48	4.46	100.00
CE3-4	NA	NA	NA	NA	NA	48	NA	NA
SQ4-1	3 (6.1%)	2 (4.1%)	2 (4.1%)	14 (28.6%)	28 (57.1%)	49	1.76	14.29
SQ4-2	6 (12.2%)	4 (8.2%)	12 (24.5%)	12 (24.5%)	15 (30.6%)	49	2.59	44.90
SQ4-3	3 (6.1%)	2 (4.1%)	4 (8.2%)	7 (14.3%)	33 (67.3%)	49	1.73	18.37
SQ4-4	2 (4.1%)	1 (2%)	2 (4.1%)	7 (14.3%)	37 (75.5%)	49	1.43	10.20
SQ5-1	10 (20.8%)	13 (27.1%)	17 (35.4%)	4 (8.3%)	4 (8.3%)	48	3.61	83.33
SQ5-2	8 (16.7%)	16 (33.3%)	11 (22.9%)	9 (18.8%)	4 (8.3%)	48	3.33	72.92
SQ5-3	7 (14.6%)	6 (12.5%)	21 (43.8%)	10 (20.8%)	4 (8.3%)	48	3.14	70.83
SQ5-4	9 (18.8%)	21 (43.8%)	12 (25%)	3 (6.3%)	3 (6.3%)	48	3.72	87.50
SQ6-1	9 (18.8%)	29 (60.4%)	1 (2.1%)	5 (10.4%)	4 (8.3%)	48	3.61	81.25
SQ6-2	7 (14.6%)	18 (37.5%)	6 (12.5%)	7 (14.6%)	10 (20.8%)	48	3.17	64.58
SQ6-3	11 (22.9%)	8 (16.7%)	13 (27.1%)	10 (20.8%)	6 (12.5%)	48	3.22	66.67
SQ6-4	13 (27.1%)	10 (20.8%)	18 (37.5%)	4 (8.3%)	3 (6.3%)	48	3.61	85.42
Criteria		Excellent 4	Proficient 3	Adequate 2	Inadequate 1	Total	Average	%≥2
CT7-1		12 (25%)	20 (41.7%)	13 (27.1%)	3 (6.3%)	48	2.94	93.75
CT7-2		10 (20.8%)	24 (50%)	11 (22.9%)	3 (6.3%)	48	2.92	93.75
CT7-3		9 (18.8%)	17 (35.4%)	15 (31.3%)	7 (14.6%)	48	2.61	85.42
CT8-1		6 (12%)	33 (66%)	11 (22%)	0 (0%)	50	2.95	100.00
CT8-2		7 (14%)	31 (62%)	12 (24%)	0 (0%)	50	2.95	100.00
CT8-3		6 (12%)	31 (62%)	13 (26%)	0 (0%)	50	2.89	100.00

CE1-1	Provides an organized speech with an appropriate introduction and conclusion
CE1-2	Provides main points that are well documented and developed clearly and concisely
CE1-3	Uses appropriate gestures, movements and eye contact
CE1-4	Speaks clearly and understandably using standard, edited English
CE1-5	Provides appropriate handouts and audio-visual aids
CE2-1	Provides a clear, concise thesis statement
CE2-2	Provides supporting paragraphs which relate to the thesis
CE2-3	Correctly incorporates outside sources
CE2-4	Uses appropriate grammar, syntax, usage, punctuation, and spelling
CE3-1	Demonstrates basic computer and operating system skills
CE3-2	Performs core application Microsoft Office applications
CE3-3	Uses a search engine to access, navigate, and evaluate information on the internet
CE3-4	Uses email with appropriate etiquette
SQ4-1	Understands Mathematical vocabulary
SQ4-2	Solves linear equations
SQ4-3	Graphs data and equations
SQ4-4	Understands Polynomials
SQ5-1	Separation of observations (data) and interpretations
SQ5-2	Reasoning supported by using a variety of evidence
SQ5-3	Interpretation and analysis of results
SQ5-4	Distinguishes well-supported from poorly-supported scientific claims
SQ6-1	Problem is recognized and investigative question is formulated
SQ6-2	Reasonable, testable hypothesis is presented
SQ6-3	Prediction is formulated as logical consequence of the hypothesis
SQ6-4	Formulation of a conclusion
CT7-1	Science evaluation: identify and gather information
CT7-2	Science evaluation: analyze and evaluate information
CT7-3	Science evaluation: synthesize and formulate conclusions
CT8-1	English evaluation: identify and gather information
CT8-2	English evaluation: analyze and evaluate information
CT8-3	English evaluation: synthesize and formulate conclusions

Communication Oral Presentation- Provides appropriate handouts and audiovisual aids (CE1-5). Results showed that 25% of students were evaluated as "inadequate." A number of students reported that the time restriction for this section of the GEA was too short, which may have contributed to the lack of appropriate visual aids for their presentations.

Communication Writing-Correctly incorporates outside sources (CE2-3). Results indicate that 48% of students were evaluated as inadequate. In the future, students will be specifically asked to cite their outside sources using APA format.

In general, the Scientific and Quantitative Reasoning (SQ4-1 through SQ6-4) results indicate that students are not performing at the minimum of an "adequate" level. The Committee realizes that these general education competencies are not adequately reinforced during a student's plan of study. The Committee has identified this as a priority area that needs to be addressed during the 2011-2012 academic cycle.

### Institution-Wide Assessment of General Education Competencies: Writing, Oral Presentation and Critical Thinking.

### Writing Across the Curriculum (WAC)

	MESALANDS COMMUNITY COLLEGE WRITING ACROSS THE CURRICULUM STUDENTS WITHOUT A PREVIOUS ENG 102 CLASS SPRING 2011 SEMESTER								
Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)	Total	Average	%≥2		
1.1.1	80 (43.7%)	58 (31.7%)	33 (18%)	12 (6.6%)	183	3.13	93.44		
1.1.2	77 (42.1%)	58 (31.7%)	35 (19.1%)	13 (7.1%)	183	3.09	92.90		
1.1.3	78 (42.6%)	54 (29.5 %)	39 (21.3 %)	12 (6.6%)	183	3.08	93.44		
1.2.1	79 (43.2%)	60 (32.8%)	32 (17.5%)	12 (6.6%)	183	3.13	93.44		
1.2.2	94 (51.4%)	51 (27.9%)	26 (14.2%)	12 (6.6%)	183	3.24	93.44		
1.2.3	75 (41%)	62 (33.9%)	37 (20.2%)	9 (4.9%)	183	3.11	95.08		
1.3.1	61 (46.6%)	18 (13.7%)	17 (13%)	35 (26.7%)	131	2.80	73.28		
1.3.2	59 (50.9%)	24 (20.7%)	10 (8.6%)	23 (19.8%)	116	3.03	80.17		
1.4.1	62 (33.2%)	50 (26.7%)	49 (26.2%)	26 (13.9%)	187	2.79	86.10		
1.4.2	67 (36.6%)	59 (32.2%)	42 (23%)	15 (8.2%)	183	2.97	91.80		

Summary of 187 students that have not taken a previous ENG 102 class

Summary of 383 students that have taken a previous ENG 102 class

	MESALANDS COMMUNITY COLLEGE WRITING ACROSS THE CURRICULUM STUDENTS WITH A PREVIOUS ENG 102 CLASS SPRING 2011 SEMESTER							
Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)	Total	Average	%≥2	
1.1.1	219 (58.7%)	97 (26%)	37 (9.9%)	20 (5.4%)	373	3.38	94.64	
1.1.2	164 (59.4%)	84 (30.4%)	26 (9.4%)	2 (0.7%)	276	3.49	99.28	
1.1.3	159 (58%)	90 (32.8%)	21 (7.7%)	4 (1.5%)	274	3.47	98.54	
1.2.1	197 (51.8%)	108 (28.4%)	68 (17.9%)	7 (1.8%)	380	3.30	98.16	
1.2.2	163 (59.1%)	69 (25%)	38 (13.8%)	6 (2.2%)	276	3.41	97.83	
1.2.3	152 (55.5%)	77 (28.1%)	40 (14.6%)	5 (1.8%)	274	3.37	98.18	
1.3.1	205 (58.9%)	56 (16.1%)	50 (14.4%)	37 (10.6%)	348	3.23	89.37	
1.3.2	160 (65.8%)	40 (16.5%)	22 (9.1%)	21 (8.6%)	243	3.40	91.36	
1.4.1	149 (39.1%)	150 (39.4%)	63 (16.5%)	19 (5%)	381	3.13	95.01	
1.4.2	151 (54.7%)	91 (33%)	32 (11.6%)	2 (0.7%)	276	3.42	99.28	

<sup>1.</sup> Provides a clear, concise thesis statement.

<sup>1.1.1</sup> Statement is clear and concise

<sup>1.1.2</sup> Statement is well reasoned

<sup>1.1.3</sup> Statement leads to plentiful additional discussion

- 2. Provides supporting paragraphs which relate to the thesis.
  - 1.2.1 Supporting paragraph are well-reasoned
  - 1.2.2 Supporting paragraphs clearly relate to the thesis
  - 1.2.3 Supporting paragraphs are cohesive and logically developed
- 3. Correctly incorporates outside sources.
  - 1.3.1 Provides relevant outside sources
  - 1.3.2 Cites outside sources correctly
- 4. Uses appropriate grammar, syntax, punctuation, and spelling.
  - 1.4.1 Writing is error free in all categories (structure, punctuation, spelling and grammar).
  - 1.4.2 Sentence structure and vocabulary are well-developed and varied.

### **Oral Presentation**

Summary of 215 students that have not taken a previous COM 102 class

	MESALANDS COMMUNITY COLLEGE								
	ORAL PRESENTATION								
	STUDENTS WITHOUT A PREVIOUS COM 102 CLASS								
	· - · · ·		NG 2011 SE	_	T				
Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)	Total	Average	%≥2		
2.1.1	51 (23.7 %)	97 (45.1 %)	56 (26 %)	11 (5.1 %)	215	2.87	94.88%		
2.1.2	43 (20 %)	105 (48.8 %)	51 (23.7 %)	16 (7.4 %)	215	2.81	92.56%		
2.1.3	46 (21.2 %)	89 (41 %)	52 (24 %)	30 (13.8 %)	217	2.70	86.18%		
2.2.1	49 (22.8 %)	100 (46.5 %)	55 (25.6 %)	11 (5.1 %)	215	2.87	94.88%		
2.2.2	56 (26.4 %)	97 (45.8 %)	49 (23.1 %)	10 (4.7 %)	212	2.94	95.28%		
2.2.3	62 (29 %)	101 (47.2 %)	45 (21 %)	6 (2.8 %)	214	3.02	97.20%		
2.3.1	46 (21.5 %)	97 (45.3 %)	54 (25.2 %)	17 (7.9 %)	214	2.80	92.06%		
2.3.2	44 (20.6 %)	95 (44.4 %)	61 (28.5 %)	14 (6.5 %)	214	2.79	93.46%		
2.3.3	51 (24.5 %)	85 (40.9 %)	42 (20.2 %)	30 (14.4 %)	208	2.75	85.58%		
2.4.1	48 (22.7 %)	112 (53.1 %)	50 (23.7 %)	1 (0.5 %)	211	2.98	99.53%		
2.4.2	49 (23.2 %)	117 (55.5 %)	44 (20.9 %)	1 (0.5 %)	211	3.01	99.53%		
2.4.3	67 (31.5 %)	99 (46.5 %)	46 (21.6 %)	1 (0.5 %)	213	3.09	99.53%		
2.5.1	65 (35.3 %)	72 (39.1 %)	19 (10.3 %)	28 (15.2 %)	184	2.95	84.78%		
2.5.2	58 (30.1 %)	79 (40.9 %)	28 (14.5 %)	28 (14.5 %)	193	2.87	85.49%		
2.5.3	71 (37.2 %)	67 (35.1 %)	34 (17.8 %)	19 (9.9 %)	191	2.99	90.05%		

	MESALANDS COMMUNITY COLLEGE ORAL PRESENTATION STUDENTS WITH A PREVIOUS COM 102 CLASS SPRING 2011 SEMESTER								
Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)	Total	Average	%≥2		
2.1.1	39 (46.4 %)	24 (28.6 %)	17 (20.2 %)	4 (4.8 %)	84	3.17	95.24%		
2.1.2	32 (38.1 %)	37 (44 %)	8 (9.5 %)	7 (8.3 %)	84	3.12	91.67%		
2.1.3	36 (40.4 %)	23 (28 %)	16 (18 %)	7 (7.9 %)	82	3.07	91.46%		
2.2.1	33 (39.3 %)	35 (41.7 %)	11 (13.1 %)	5 (6 %)	84	3.14	94.05%		
2.2.2	36 (42.9 %)	38 (45.2 %)	9 (10.7 %)	1 (1.2 %)	84	3.30	98.81%		
2.2.3	41 (49.4 %)	23 (27.7 %)	18 (21.7 %)	1 (1.2 %)	83	3.25	98.80%		
2.3.1	46 (54.1 %)	31 (36.5 %)	7 (8.2 %)	1 (1.2 %)	84	3.44	98.82%		
2.3.2	52 (61.9 %)	21 (25 %)	10 (11.9 %)	1 (1.2 %)	84	3.48	98.81%		
2.3.3	42 (56 %)	16 (21.3 %)	12 (16 %)	5 (6.7 %)	75	3.27	93.33%		
2.4.1	22 (34.4 %)	37 (57.8 %)	4 (6.3 %)	1 (1.6 %)	64	3.25	98.44%		
2.4.2	18 (28.1 %)	45 (70.3 %)	0 (0 %)	1 (1.6 %)	64	3.25	98.44%		
2.4.3	37 (58.7 %)	24 (38.1 %)	1 (1.6 %)	1 (1.6 %)	63	3.54	98.41%		
2.5.1	13 (23.2 %)	21 (37.5 %)	5 (8.9 %)	17 (30.4 %)	56	2.54	69.64%		
2.5.2	9 (16.1 %)	25 (44.6 %)	5 (8.9 %)	17 (30.4 %)	56	2.46	69.64%		
2.5.3	19 (30.2 %)	20 (31.7 %)	7 (11.1 %)	17 (27 %)	63	2.65	73.02%		

- 1. Provides a well organized speech with an appropriate introduction and conclusion.
  - 2.1.1 Very well organized
  - 2.1.2 Attention-grabbing introduction
  - 2.1.3 Convincing conclusion
- 2. Provides main points that are well-documented, compelling, supported with facts, developed clearly and concisely, and focused on the topic.
  - 2.2.1 All main points are well-documented and supported by numerous, compelling facts
  - 2.2.2 Clearly and concisely presented
  - 2.2.3 Remains focused on topic throughout entire presentation
- 3. Uses appropriate gestures, movements and eye contact
  - 2.3.1 Excellent gestures and eye contact
  - 2.3.2 Conversational presentation
  - 2.3.3 Utilize note cards appropriately
- 4. Speaks clearly and understandably using standard, edited English with correct mechanics (pronunciation, sentence structure and grammar) relative to audience.
  - 2.4.1 Excellent mechanics throughout
  - 2.4.2 Very appropriate presentation relative to audience
  - 2.4.3 Tone is respectful and civil
- 5. Provides appropriate handouts and/or visual aids.
  - 2.5.1 Provides entire audience with useful, presentation quality handouts
  - 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
  - 2.5.3 Grammatically correct material

### **Critical Thinking**

Summary of 396 students that have not taken a previous laboratory science class

	MESALANDS COMMUNITY COLLEGE								
	CRITICAL THINKING								
	STUDENTS WITHOUT A PREVIOUS LABORATORY CLASS								
		SPRII	NG 2011 SE	MESTER					
Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)	Total	Average	%≥2		
6.1.1	108 (27.6%)	134 (34.2%)	100 (25.5%)	50 (12.8%)	392	2.77	87.24%		
6.1.2	86 (29.6%)	114 (39.2%)	63 (21.6%)	28 (9.6%)	291	2.89	90.38%		
6.1.3	81 (29.7%)	89 (32.6%)	72 (26.4%)	31 (11.4%)	273	2.81	88.64%		
6.2.1	86 (23.2%)	116 (31.4%)	109 (29.5%)	59 (15.9%)	370	2.62	84.05%		
6.2.2	82 (29.8%)	100 (36.4%)	73 (26.5%)	20 (7.3%)	275	2.89	92.73%		
6.2.3	73 (28%)	90 (34.5%)	74 (28.4%)	24 (9.2%)	261	2.81	90.80%		
6.3.1	91 (23.4%)	135 (34.7%)	108 (27.8%)	55 (14.1%)	389	2.67	85.86%		
6.3.2	78 (28%)	118 (42.3%)	63 (22.6%)	20 (7.2%)	279	2.91	92.83%		
6.3.3	68 (25.6%)	96 (36.1%)	77 (28.9%)	25 (9.4%)	266	2.78	90.60%		

Summary of 52 students that have taken a previous laboratory science class

	MESALANDS COMMUNITY COLLEGE CRITICAL THINKING STUDENTS WITH A PREVIOUS LABORATORY CLASS SPRING 2011 SEMESTER								
Criteria	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)	Total	Average	%≥2		
6.1.1	22 (53.7%)	12 (29.3%)	6 (14.6%)	1 (2.4 %)	41	3.34	97.56%		
6.1.2	18 (34.6%)	21 (40.4%)	11 (21.2%)	2 (3.8 %)	52	3.06	96.15%		
6.1.3	17 (32.7%)	21 (40.4%)	13 (25%)	1 (1.9 %)	52	3.04	98.08%		
6.2.1	13 (34.2%)	17 (44.7%)	7 (18.4%)	1 (2.6 %)	38	3.11	97.37%		
6.2.2	21 (41.2%)	19 (37.3%)	10 (19.6%)	1 (2 %)	51	3.18	98.04%		
6.2.3	13 (25.5%)	25 (49%)	12 (23.5%)	1 (2 %)	51	2.98	98.04%		
6.3.1	12 (23.5%)	24 (47.1%)	14 (27.5%)	1 (2 %)	51	2.92	98.04%		
6.3.2	12 (23.1%)	27 (51.9%)	11 (21.2%)	2 (3.8 %)	52	2.94	96.15%		
6.3.3	13 (25%)	25 (48.1%)	12 (23.1%)	2 (3.8 %)	52	2.94	96.15%		

- 1. Identify and Gather
  - 6.1.1 Asks insightful questions
  - 6.1.2 Critiques content
  - 6.1.3 Examines inconsistencies
- 2. Analyze and evaluate
  - 6.2.1 Analyzes and evaluates thoroughly
  - 6.2.2 Uses reasonable judgment
  - 6.2.3 Critically discriminates between good and bad information
- 3. Synthesize and Formulate Conclusions
  - 6.3.1 Discusses issues thoroughly and argues succinctly

Summary: This data represents the College's first attempt at assessing general education competency attainment across the curriculum. Additional data will need to be collected during future semesters (see the *General Education Competency Reporting Schedule*) to identify trends and strengths and weaknesses. It is also clear that all faculty need to be better trained at understanding and using the general education rubrics.

### Embedded Assessments: ENG 104 and MATH 110

Summary of 29 English 104 students that were assessed; 15 on campus and 14 at the Guadalupe County Correctional Facility (GCCF):

MESALANDS COMMUNITY COLLEGE ENG 104: ENGLISH COMPOSITION ASSESSMENT SPRING 2011 SEMESTER								
English Communication Objectives:	Students should perform the following activities to meet the	the ob	Percent meeting the objective					
Students will analyze and evaluate oral and written communication in terms of situation, audience, purpose, aesthetics, and diverse points of view.	objectives: Understand, appreciate, and critically evaluate a variety of written and spoken messages in order to make informed decisions.	97.6	College*  84.4					
2. Students will express a primary purpose in a compelling statement and order supporting points logically and convincingly.	Organize their thinking to express their viewpoints clearly, concisely, and effectively.	95.2	82.2					
3. Students will use effective rhetorical strategies to persuade, inform, and engage.	Select and use the best means to deliver a particular message to a particular audience. Rhetorical strategies include but are not limited to modes (such as narration, description, and persuasion), genres (essays, web pages, reports, proposals), media and technology (PowerPoint, electronic writing), and graphics (charts, diagrams, formats).	98.2	96.7					
4. Students will employ writing and/or speaking processes such as planning, collaborating, organizing, composing, revising, and editing to create presentations using correct diction, syntax, grammar, and mechanics.  5. Students will integrate research	Use standard processes for generating documents or oral presentations independently and in groups.  Gather legitimate information to	76.2	88.9 97.3					

correctly and ethically from credible sources to support the primary purpose of a communication.	support ideas without plagiarizing, misinforming or distorting.		
6. Students will engage in reasoned civic discourse while recognizing the distinctions among opinions, facts, and inferences.	Negotiate civilly with others to accomplish goals and to function as responsible citizens.	89.3	83.3

<sup>\*</sup>GCCF was a distance learning course while the College course was taught at Main Campus in a traditional classroom setting.

Summary of 30 Math 110: Of the College Algebra students that were assessed, 21 were on campus and 11 were at Clayton High School:

MESALANDS COMMUNITY COLLEGE MATH 110: COLLEGE ALGEBRA ASSESSMENT SPRING 2011 SEMESTER						
Mathematics	Students should perform the following activities	Percent meeting the objective				
Objectives:	to meet the objectives:	Campus*	Clayton H.S.*			
Students will construct and analyze graphs and/or data sets.	<ul> <li>Sketch the graphs of linear, quadratic, higher-order polynomial, rational, absolute value, exponential, logarithmic, and radical functions.</li> <li>Construct graphs using a variety of techniques including plotting points, using properties of basic transformations of functions, and by using key characteristics of functions such as end behavior, intercepts and asymptotes.</li> <li>Determine the key features of a function such as domain/range, intercepts, and asymptotes.</li> </ul>	57.9	79.6			
2. Students will use and solve various kinds of equations.	<ul> <li>Solve quadratic equations using techniques such as factoring, completing the square and square root method, and the quadratic formula.</li> <li>Solve equations using inverse operations for powers/roots, exponents/logarithms and other arithmetic operations.</li> <li>Use the equation of a function to determine its domain, to perform function operations, and to find the inverse of a function.</li> </ul>	46.1	93.2			
3. Students will understand and write mathematical explanations using appropriate definitions and symbols.	<ul> <li>Correctly use function notation and the vocabulary associated with functions.</li> <li>Describe the implications of key features of a function with respect to its graph and/or in relation to its real world context.</li> </ul>	47.4	86.4			
4. Students will demonstrate problem solving skills within the	<ul> <li>Apply the knowledge of functions to identify an appropriate type of function to solve application problems.</li> <li>Solve application problems including those requiring</li> </ul>	39.5	75.0			

context of	maximization or minimization of quadratic functions	
mathematical	and exponential growth & decay problems.	
applications.	<ul> <li>Interpret the results of application problems in terms</li> </ul>	
	of their real world context.	

<sup>\*</sup>Both the College course (at Main Campus) and the dual enrollment Clayton High School course were taught in a traditional classroom setting.

Summary: This data represents the College's first attempt at embedded assessment in order to determine whether the quality and quantity of learning is similar across different delivery modes and different educational sites. Identical assessment tools were used between the different sites. The SLAC will need to address the math assessment tool and how it can be implemented via distance learning using a Moodle platform.

#### **INSTITUTIONAL SURVEYS**

Mesalands Community College has a regular cycle of surveys (Student Opinion Survey, Withdrawing/Non-Returning Student Survey, Alumni Survey and others) which provide indirect measures of student learning, as well as some attitudinal data useful for assessment. However, no results relevant to student assessment were reported for the 2010-11 academic year.

### PROGRAM LEVEL ASSESSMENT

#### **DEGREES AND CERTIFICATES GRANTED**

The Associate of Applied Science-General Studies program continued to be a popular degree program. A large number of certificates in Computer/Information Systems were also granted. The Wind Energy Technology program also had its second Associate of Applied Science graduates this year. A comparison of the number of graduates in the various degree plans of the 2010-2011 academic year with the previous seven years follows:

ASSOCIATE OF ARTS DEGREES								
Program	2003- 04	2004- 05	2005- 06	2006- 07	2007- 08	2008 - 09	2009- 10	2010 - 11
Business Administration			3			2	1	5
Criminal Justice	1	2			1			
Early Childhood Education		1	1	1	2	2	4	1
Elementary Education	5	1	6	3	2	2	1	
Fine Arts			1		1		2	
General Studies			1				1	
Human Services			1					
Paleontology				1			1	2
Pre-Dentistry			1					
Pre-Engineering	1				1			
Pre-Medical Arts	2							1
Secondary Education		1	2	1	2			
Social Work		2	2	2	1	5		1
University Studies	3	3	4	5	2	2	4	7
ASSO	CIATE	OF APE	PLIED S	CIENC	E DEGI	REES		
Program	2003 - 04	2004 - 05	2005 - 06	2006 - 07	2007- 08	2008 - 09	2009 -10	2010 - 11
Agricultural Business			1	2				3
Animal Science	3			3	2	2	3	5
Automotive Technology	1	1			1		1	1
Building Trades					1		1	
Business Administration	7		7	3	2	3	4	4
Business Office Technology	6		3					1
Communications						1		
Computer Science				1		1	2	
Diesel Technology			1	1				3
Farrier Science			2	1	2		3	2
General Studies	4		4	4	9	4	12	14
Office Systems				1		15	2	
Public Administration				1	1	2	3	1
Wind Energy Technology							16	22

OCCUPATIONAL CERTIFICATES								
Program	2003- 04	2004- 05	2005- 06	2006- 07	2007- 08	2008- 09	2009 - 10	2010 - 11
Automotive Technology					1			
Building Trades				1		2	2	
Commercial Truck Driving	13	21	16	29	48			
Computer/ Information Systems			8		18			29
Corrections Officer								14
Diesel Technology					1			
Equine Dentistry								6
Farrier Science	3	1	1		6	3	3	7
Fine Arts			3		3		1	
Metal Arts							1	1
Nail Technology	3	1	2					
Pre-Nursing					2	7	2	2
Wind Energy Technology						17	23	
Total Degrees and Certificates	52	34	70	60	108	70	93	132

#### COMPLETION RATES OF GENERAL EDUCATION CORE CLASSES

Not all students find it in their best interests to obtain a degree or certificate. They may transfer to another college or university to obtain the degree of their choice. The following completion rates of general education core classes provide a measure of transfer-preparation and readiness for these students and those in degree programs at the College. The data below also includes dual enrollment of high school students taking classes through the College.

This past year there was a 40% or more increase in the number of students enrolled in English 104: English Composition and Research, ECON 252: Microeconomics, MATH 110: College Algebra, and PSY 101: Introduction to Psychology. On the other hand, Art 101: Art Appreciation, BIOL 113: Introduction to Biology, ECON 251: Macroeconomics, and GEOL 141: Introduction to Environmental Science, saw decreases of about 30% in student enrollment. Overall, there has been a 54% increase in the number of students taking general education classes since 2007. The percentage of students passing with a grade of C or better has been fairly constant over the past four years at about 83%.

It is important for the College to identify trends indicating courses with a high failure and/or drop-out rate. Based on this data, drop-out rates from specific courses is not identified. Drop-out rates are a critical measure to assess student success and will be measured in future semesters.

COMPLETION RATES OF GENERAL EDUCATION TRANSFER CLASSES 2007-2011 ACADEMIC YEARS								
Year	2007	7-08	2008-09		2009-10		2010-11	
Course	Number Enrolled	% C or better	Number Enrolled	% C or better	Number Enrolled	% C or better	Number Enrolled	% C or better
			Area I:	Communic	ations			
ENG 102	187	86.63	258	81.78	205	78.05	221	80.54
ENG 104	71	81.69	145	90.34	120	89.17	171	89.47
COM 101	83	73.49	41	70.73	93	96.77	87	87.36
COM 102	49	77.55	45	86.67	86	75.58	94	76.60
			Area	II: Mathem	atics			
MATH 110	36	77.78	58	82.76	51	80.39	79	86.08
STAT 213	16	87.5	16	68.75	17	94.11	7	42.86
		00		Laboratory		<u> </u>	·	.=.00
BIOL 113	43	76.74	23	78.26	64	73.44	42	69.05
CHEM 115	41	95.12	102	97.06	12	75.00	35	91.43
CHEM 116	16	100.0	41	90.24	11	100.0	23	86.96
GEOL 141	12	50.0	37	81.08	65	70.77	45	75.55
GEOL 151	15	53.33	5	100.0	27	100.0	3	100.0
PHYS 115	0	NA	0	NA	5	60.00	5	100.0
PHYS 120	12	83.33	5	60.00	0	NA	24	29.17
			ea IV: Socia		-			
ANTH 101	20	55.00	17	82.35	5	60.00	8	50.00
ECON 251	54	83.33	97	92.78	105	76.19	77	93.57
ECON 252	10	40.00	19	52.63	7	85.71	24	58.33
PSCI 102	41	100.0	90	88.89	77	96.10	85	89.41
PSCI 202	11	90.91	17	100.0	32	96.88	33	84.85
PSY 101	46	91.30	110	84.55	107	88.79	159	86.79
SOC 101	29	96.55	50	94.00	48	89.58	44	88.64
SOC 212	14	78.57	0	NA	16	56.25	12	100.0
	Area V: Humanities and Fine Arts							
ART 101	62	80.65	31	54.84	109	55.96	77	71.43
MUS 101	26	80.77	39	66.67	39	79.49	36	86.11
HIST 101	23	95.65	26	92.31	58	96.55	50	84.00
HIST 102	28	96.43	35	100.0	59	96.61	29	86.21
HIST 121	11	90.91	10	70.00	7	57.14	8	100.0
	Total Number of Students Enrolled and Overall %C or Better Averages							
Totals	956	83.16	1317	85.12	1425	82.25	1478	82.81
	1			l	II			

### STUDENT LEARNING ASSESSMENT PROGRAM REPORTS

The purpose of program level assessment is to document how well students are accomplishing the specific program objectives and general education competencies. The program objectives and general education competencies are Mesalands' contract with all stakeholders and reflect those competencies that students will possess and demonstrate upon graduation. These program objectives and general education competencies reflect those knowledge, skills and professional dispositions valued by workplace employers and other interested parties and represent the most deeply held values of the College; thereby driving much of what occurs at Mesalands. Degree programs are required to assess both general education competency and program objective outcomes. Certificate programs are required to measure program objective outcomes only.

The following Student Learning Assessment Program Reports document the College's attempt to more succinctly and comprehensively identify and measure outcomes attainment and to use this information to improve learning.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT ASSOCIATE OF APPLIED SCIENCE – GENERAL STUDIES 2010-2011

This program, called experiential learning, will allow students to apply work experience and training toward an Associate of Applied Science degree. It is a way for students to earn course credits at Mesalands Community College for having completed on-the-job training and courses where certificates are given. Obvious programs that may qualify for experiential learning credits include certificate programs such as Diesel Technology, Farrier Science and other similar programs. Experiential learning allows the student to improve upon that certificate to obtain an Applied Science degree.

Students who have had applicable training or previous vocational or military experience may petition for college credit by submitting an Experiential Learning Portfolio. Up to 18 college credits may be awarded toward the Associate of Applied Science Degree in General Studies. Credit is awarded only if appropriate experiential learning has occurred and has been documented in the Experiential Learning Portfolio Handbook.

### **General Education Competencies**

Upon completion of the Associate of Applied Science General Studies Degree Program:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- 3. Students will identify, evaluate and analyze evidence to guide decision making and to communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Associate of Applied Science General Studies Degree assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust (PDSA) Cycle that follows students from their first term through graduation.

### **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> </ul>
Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	GEA College Rubric     CAAP	MATH 101     Lab Science     Requirement
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	GEA College Rubric     CAAP	<ul> <li>ACS 100</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> </ul>

### **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool: General Education Objective(s): Goal Results:** 

GEA College Rubric 1, 2, 3 100% "excellent (4)", "proficient (3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	3	2	67%(mean=2.50)
• 2	3	3	100%(mean=2.93)
• 3	3	3	100%(mean=4.25)*
2009-2010			
• 1	2	2	100%(mean=3.125)
• 2	2	2	100%(mean=3.375)
• 3	2	1	50%(mean=3.5)*

<sup>1</sup> Present ideas in writing.

**Measurement Tool: General Education Objective(s): Goal Results:** 

**GEA College Rubric** 4, 5, 6 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	3	0	0%(mean=1.25)
• 5	3	2	67%(mean=2.92)
• 6	3	2	67%(mean=3.08)
2009-2010			
• 4	2	0	0%(mean=2.125)
• 5	2	2	100%(mean=4.25)
• 6	2	2	100%(mean=4.0)

<sup>4</sup> Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on a 5 point scale.

<sup>6</sup> Apply scientific methods to the inquiry process.

Measurement Tool:

**General Education Objective(s):** 

**Goal Results:** 

GEA College Rubric Critical Thinking-Science

Evaluation.

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	3	100%(mean=3.33)
• 8	3	3	100%(mean=2.67)
• 9	3	3	100%(mean=2.67)

<sup>7.</sup> Identify and gather information.

Measurement Tool: General Education Objective(s):

**Goal Results:** 

GEA College Rubric Critical Thinking-English

Evaluation.

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	3	100%(mean=3.00)
• 8	3	3	100%(mean=3.00)
• 9	3	3	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric 7, 8, 9

100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	2	2	100%(mean=3.87)
• 8	2	2	100%(mean=4.0)
• 9	2	2	100%(mean=3.25)

<sup>7.</sup> Read and analyze complex ideas.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	4(24.5%)	N/A	4(21.5%)	3(13%)	3(13%)
2009-2010	2(89%)	N/A	2(57%)	2(60%)	2(51%)

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

Lack of data (other than end-of-program data) to support whether or not general education competencies are being accomplished.

#### Goal

Collect a greater variety of data other than during students' last semester prior to graduation.

#### **Action Plan**

Problem Area and Goal will be discussed with the Student Learning Assessment Committee (SLAC), the body charged with designing a more meaningful and comprehensive collection of assessment data.

#### Results

No results reported. Action plan was not implemented.

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Lack of data (other than end-of-program data) to support whether or not general education competencies are being accomplished.

#### Goal

Collect and report on data based on *General Education Competency Reporting Schedule*.

#### **Action Plan**

- 1) Lead faculty member will identify students enrolled in AAS General Studies Program.
- 2) Lead faculty member will identify courses that those students are enrolled in.
- 3) Lead faculty will contact instructors of those courses in order to collect data based on the *General Education Competency Reporting Schedule*.

#### **Results**

To be presented and analyzed in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT ASSOCIATE OF ARTS - LIBERAL ARTS GENERAL STUDIES 2010-2011

Recognizing that adult learners have experiences outside the college classroom that have led to the acquisition of knowledge and skills equivalent to that which would have been obtained in a traditional course, Mesalands Community College provides a mechanism for awarding college credit based upon the documentation of collegiate-equivalent learning.

Students with appropriate life experiences may petition for college credit by developing and submitting an Experiential Learning Portfolio. Up to 18 hours college credits may be awarded toward the Associate of Arts Degree in General Studies. Credit is awarded only if appropriate experiential learning has occurred and is documented as specified in the Experiential Learning Portfolio Handbook.

#### **General Education Competencies**

Upon completion of the Liberal Arts General Studies Associate of Arts Degree Program:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Liberal Arts General Studies Associate of Arts Degree assessment plan is in its second year and is addressed via a plan→do→study→adjust cycle that follows students from their first term through graduation.

## **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>Lab Science Requirement</li> <li>Social/Behavioral Science Requirement</li> <li>Fine Arts/Humanities Requirement</li> </ul>
Mathematical and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	GEA College Rubric     CAAP	MATH 110     Lab Science     Requirement
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	GEA College Rubric     CAAP	<ul> <li>ACS 100</li> <li>Lab Science Requirement</li> <li>Social/Behavioral Science Requirement</li> <li>Fine Arts/Humanities Requirement</li> </ul>

### **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College-created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

**GEA College Rubric Measurement Tool:** General Education Objective(s): 1, 2, 3 **Goal Results:** 

100% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	1	1	100%(mean=3.0)
• 2	1	1	100%(mean=3.2)
• 3	1	1	100%(mean=3.75)
2009-2010			
• 1	1	1	100%(mean=3.0)
• 2	1	1	100%(mean=3.2)
• 3	1	1	100%(mean=3.75)

<sup>1</sup> Present ideas in writing.

**GEA College Rubric Measurement Tool:** General Education Objective(s): 4, 5, 6

**Goal Results:** 

100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	1	1	100% (mean=4.5)
• 5	1	1	100%(mean=4.75)
• 6	1	1	100%(mean=3.75)
2009-2010			
• 4	1	1	100% (mean=4.5)
• 5	1	1	100%(mean=4.75)
• 6	1	1	100%(mean=3.75)

<sup>4</sup> Demonstrate mathematical principles.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>5</sup> Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 7, 8, 9

Goal Results: 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	1	1	100%(mean=4.75)
• 8	1	1	100%(mean=3.0)
• 9	1	1	0%(mean=4.0)

7. Read and analyze complex ideas.

8. Locate, evaluate and apply research information.

9. Evaluate and present well-reasoned arguments

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2009-2010	1(31%)	1(91%)	1(53%)	1(48%)	1(64%)

# PDSA CYCLE GOALS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

#### Goal

Collect a greater variety of data other than during the students' last semester prior to graduation.

#### **Action Plan**

Problem Area and Goal will be discussed with Student Learning Assessment Committee (SLAC), the body charged with designing a more meaningful and comprehensive collection of assessment data.

#### Results

Not reported. The Associate of Arts – Liberal Arts General Studies degree is being discontinued beginning in the 2011-2012 academic year.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT ASSOCIATE OF ARTS - UNIVERSITY STUDIES 2010-2011

The University Studies option provides opportunities for students to explore areas of student interest while developing proficiencies in the liberal arts and selected areas of interest. Graduates of the program will have completed coursework that explores a variety of academic disciplines. Students intending to use the University Studies option as a basis for transfer should make certain that their course selections meet the requirements of the applicable degree at the college or university to which they plan to transfer.

#### **General Education Competencies**

Upon completion of the University Studies Degree Program:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The University Studies assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that follows students from their first term through graduation.

### **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>Lab Science Requirement</li> <li>Social/Behavioral Science Requirement</li> <li>Fine Arts/Humanities Requirement</li> </ul>
Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	GEA College Rubric     CAAP	MATH 110     Lab Science     Requirement
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	GEA College Rubric     CAAP	ACS 100     Lab Science     Requirement     Social/Behavioral     Science Requirement     Fine Arts/Humanities     Requirement

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College-created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

**Measurement Tool: General Education Objective(s): Goal Results:** 

**GEA College Rubric** 1, 2, 3 100% "excellent (4)", "proficient (3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	5	4	80%(mean=2.75)
• 2	5	5	100%(mean=3.85)
• 3	5	5	100%(mean=4.55)*
2009-2010			
• 1	3	3	100%(mean=2.17)
• 2	3	3	100%(mean=2.73)
• 3	3	2	67%(mean=2.31)8

<sup>1</sup> Present ideas in writing.

**Measurement Tool: General Education Objective(s): Goal Results:** 

**GEA College Rubric** 

4, 5, 6

100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	5	2	40%(mean=2.50)
• 5	5	3	60%(mean=3.40)
• 5	5	4	80%(mean=3.55)
2009-2010			
• 4	3	1	33% (mean=2.17)
• 5	3	3	100%(mean=4.08)
• 6	3	1	33%(mean=2.58)

<sup>4</sup> Demonstrate mathematical principles.

<sup>2</sup> Present ideas orally according to standard usage.3 Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

**Measurement Tool: General Education Objective(s):** 

GEA College Rubric Critical Thinking-Science Evaluation.

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	5	5	100%(mean=2.80)
• 8	5	5	100%(mean=2.80)
• 9	5	4	80%(mean=2.20)

<sup>7.</sup> Identify and gather information.

**Goal Results:** 

**Goal Results:** 

**Measurement Tool: General Education Objective(s):** 

**GEA College Rubric** Critical Thinking-English

Evaluation.

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	5	5	100%(mean=3.00)
• 8	5	5	100%(mean=3.40)
• 9	5	5	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

**Measurement Tool: General Education Objective(s): Goal Results:** 

**GEA College Rubric** 7, 8, 9

100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	3	3	100%(mean=3.92)
• 8	3	1	33%(mean=2.67)
• 9	3	2	66%(mean=3.67)

<sup>7.</sup> Read and analyze complex ideas.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-11	6(51.8%)	5(66.8%)	6(56%)	6(54.2%)	6(61%)
2009-10	3(29%)	2(85%)	3(26%)	3(27%)	3(31%)

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

#### Goal

Collect a greater variety of data other than during the students' last semester prior to graduation.

#### **Action Plan**

Problem Area and Goal will be discussed with Student Learning Assessment Committee (SLAC), the body charged with designing a more meaningful and comprehensive collection of assessment data.

#### Results

No results reported. Action plan was not implemented.

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

#### Goal

Collect and report data based on *General Education Competency Reporting Schedule*.

#### **Action Plan**

- 1) Lead faculty member will identify students enrolled in University Studies Program.
- 2) Lead faculty member will identify courses that those students are enrolled in.
- 3) Lead faculty will contact instructors of those courses in order to collect data based on *General Education Competency Reporting Schedule*.

#### **Results**

To be presented and analyzed in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT ANIMAL SCIENCE 2010-2011

The Animal Science program provides opportunity and instruction towards employment as well as continuing education opportunities at the university level. Mesalands Community College, through its Animal Science Program, starts students on the pathway towards a variety of careers that are available in the field of animal science. From feed or agricultural medical sales to livestock nutritionist, buyer, handler and manager, the field of animal science offers a variety of prospective career paths.

The Animal Science program at Mesalands Community College provides educational options in either equine science or beef science.

- 1. Equine Science (horse science) involves multiple careers in the equine industry. Whether you are interested in working at a large stable, on a breeding farm or to have your own horses, having a background in equine science provides the foundation of sound equine management practices.
  - The Equine Science option consists of three parts: Animal Science department core classes, equine science classes, and the general education core classes. The combination of these courses provides a comprehensive educational experience for many entry level positions in the equine industry.
- Beef science involves careers ranging from livestock exchange personnel to feed sales and farm/ranch manager. All segments of the beef industry-from breeding and birth to slaughter and food sales-create the need for knowledgeable people responsible for maintaining industry standards.
  - The Beef Science option in Animal Science includes three parts of the curriculum: the Animal Science department core classes, the Beef Science option classes, and general education course requirements. The Beef Science option classes emphasize nutrition and beef production.

### **Program Objectives/Competencies**

Upon completion of the Animal Science Associate Degree Program:

- 1. The student will recognize, demonstrate, and explain the function and role of livestock within the agricultural and food industry.
- 2. The student will recognize and evaluate the use, structure, and function of livestock for various uses, as well as present their findings in a speech, such as a set of reasons.
- 3. The student will apply sound financial and management practices as well as principles utilized in the agricultural industry.
- 4. The Equine Science student will demonstrate a broad-based understanding of biological and management principles and develop the ability to incorporate the use of these principles into the horse industry, along with the aptitude to critically evaluate industry issues.
- 5. The Beef Science student will demonstrate a broad-based understanding of biological and management principles and will develop the ability to incorporate the use of these principles into the beef cattle industry along with the aptitude to critically evaluate industry issues.

### **General Education Competencies**

Upon completion of the Animal Science Associate Degree Program, and in addition to the above mentioned program objectives/competencies:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- 2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- 3. Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Animal Science assessment plan is in its second year and is addressed via a plan→do→study→adjust cycle that begins every fall term and follows one Animal Science cohort from the first term through graduation.

# **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

	Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
r e e v a	The student will recognize, demonstrate, and explain the function and role of livestock within the agricultural and food industry.	<ul> <li>Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class Projects</li> <li>Essays</li> <li>Class Presentations</li> </ul>	• ANSC 100 • RGSC 100 • ANSC 150 • ANSC 170 • ANSC 245 • ANSC 230 • ANSC 151 • ANSC 224 • ANSC 275 • ANSC 255
r tl fi v a fi s	The student will recognize and evaluate the use, structure, and function of livestock for various uses, as well as present their findings in a speech, such as a set of reasons.	<ul> <li>Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class Projects</li> <li>Essays</li> <li>Class Presentations</li> </ul>	• ANSC 100 • RGSC 100 • ANSC 141 • ANSC 150 • ANSC 170 • ANSC 245 • ANSC 230 • ANSC 151 • ANSC 224 • ANSC 275 • ANSC 255
n a	The student will apply sound financial and management practices as well as principles utilized in the agricultural industry	<ul> <li>Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class Projects</li> <li>Essays</li> <li>Class Presentations</li> </ul>	• ACS 100 • ANSC 100 • ANSC 170 • ABM 264 • ANSC 245 • ANSC 230 • ABM 265 • ANSC 224 • ANSC 275 • BUS 221 • ANSC 255

4.	The Equine Science student will demonstrate a broadbased understanding of biological and management principles and develop the ability to incorporate the use of these principles into the horse industry along with the aptitude to critically evaluate industry issues.	<ul> <li>Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class Projects</li> <li>Essays</li> <li>Labs</li> <li>Class Presentations</li> </ul>	• ANSC 100 • RGSC 100 • ABM 162 • ANSC 150 • ANSC 170 • ABM 264 • ANSC 245 • ANSC 230 • ANSC 151 • ANSC 224 • ANSC 275
5.	The Beef Science student will demonstrate a broadbased understanding of biological and management principles and develop the ability to incorporate the use of these principles into the beef cattle industry along with the aptitude to critically evaluate industry issues.	<ul> <li>Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class Projects</li> <li>Essays</li> <li>Lab's</li> <li>Class Presentations</li> </ul>	• ANSC 100 • RGSC 100 • ABM 162 • ANSC 150 • ANSC 170 • ABM 264 • ANSC 245 • ANSC 230 • ABM 265 • ANSC 275 • ANSC 255

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool:Written ExamProgram Objective(s):1, 2, 3, 4, 5Goal Results:75% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010 ANSC 100	11	10	91%
2009-2010 ANSC 270	3	3	100%
2010-2011 ANSC 100	10	9	90%(Mean=82.5%)
2010-2011 RGSC 100	7	7	100%(Mean=86.3%)
2010-2011 ANSC 150	2	2	100%(Mean=90.0%)
2010-2011 ANSC 170	2	2	100%(Mean=92.0%)
2010-2011 ANSC 224	12	10	83%(Mean=84.6%)
2010-2011 ANSC 230	6	4	66.6%(Mean=76.5%)
2010-2011 ANSC 245	5	5	100%(Mean=96.2%)
2010-2011 ANSC 255	5	5	100%(Mean=83.4%)
2010-2011 ANSC 270	3	3	100%(Mean=88.0%)
2010-2011 ANSC 275	11	11	100%(Mean=84.2%)
2010-2011 ANSC 285	3	3	100%(Mean=90.0%)

Measurement Tool:Project PaperProgram Objective(s):1, 2, 3, 4, 5Goal Results:75% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	8	8	100%
2010-2011 ANSC 100	10	8	80%(Mean=78.5%)
2010-2011 RGSC 100	7	7	100%(Mean=81.0%)
2010-2011 ANSC 150	2	2	100%(Mean=88.0%)
2010-2011 ANSC 170	2	2	100%(Mean=95.0%)
2010-2011 ANSC 224	12	9	75%(Mean=80.6%)
2010-2011 ANSC 230	6	5	83.3%Mean=82.0%)
2010-2011 ANSC 245	5	5	100%(Mean=96.2%)
2010-2011 ANSC 255	5	5	100%(Mean=83.4%)
2010-2011 ANSC 270	3	3	100%(Mean=90.0%)
2010-2011 ANSC 275	11	11	100%(Mean=80.0%)
2010-2011 ANSC 285	3	3	100%(Mean=91.0%)

Measurement Tool: Livestock Evaluation Class Exercise- ANSC

170

Program Objective(s): 2

Goal Results: 100% pass rate;

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	8	8	100%

Measurement Tool: Meat Animal/Carcass Evaluation Class

Exercise - ANSC 270

Program Objective(s): 2

Goal Results: 75% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	3	3	100%
2010-2011 ANSC 270	3	3	100%(Mean=84.7%)

Measurement Tool: Equine Management Project- ANSC 224

Program Objective(s): 4

**Goal Results:** 75% pass rate;

Reporting Period	Reporting Period # of Students Attempting		% Passing
2010-2011 ANSC 224	12	10	83.3%(Mean=80.9%)

Measurement Tool: Beef Production Project- ANSC 255

Program Objective(s): 5

**Goal Results:** 75% pass rate;

Reporting Period	eporting Period # of Students Attempting		% Passing
2010-2011 ANSC 255	5	5	100%(Mean=79.0%)

### **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication	GEA College Rubric	• ACS 100
Present ideas in	• CAAP	• ANSC 100
writing.	• CAT	• RGSC 100
2. Present ideas orally	Class Presentation	• ANSC 141
according to standard	Class Writing	• ANSC 150
usage.	Assignment	• ANSC 170

3. Demonstrate application of information technology.		<ul> <li>ANSC 245</li> <li>ANSC 230</li> <li>ANSC 151</li> <li>ANSC 224</li> <li>ANSC 275</li> <li>ANSC 255</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Sciences</li> </ul>
Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	<ul> <li>ANSC 100</li> <li>RGSC 100</li> <li>ANSC 141</li> <li>ANSC 150</li> <li>ANSC 170</li> <li>ANSC 245</li> <li>ANSC 230</li> <li>ANSC 151</li> <li>ANSC 224</li> <li>ANSC 275</li> <li>ANSC 255</li> <li>Lab Sciences</li> </ul>
<ul> <li>Critical Thinking</li> <li>7. Read and analyze complex ideas.</li> <li>8. Locate, evaluate and apply research information.</li> <li>9. Evaluate and present well-reasoned arguments.</li> </ul>	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	<ul> <li>ACS 100</li> <li>ANSC 100</li> <li>RGSC 100</li> <li>ANSC 141</li> <li>ANSC 150</li> <li>ANSC 170</li> <li>ANSC 245</li> <li>ANSC 230</li> <li>ANSC 151</li> <li>ANSC 224</li> <li>ANSC 275</li> <li>ANSC 255</li> <li>Lab Sciences</li> <li>Social Sciences/ Humanities Requirement</li> </ul>

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College-created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

**GEA College Rubric Measurement Tool: General Education Objective(s):** 1, 2, 3 100% "excellent (4)", "proficient **Goal Results:** 

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing % Passing	
2009-2010			
• 1	1	1	100%(mean=3.25)
• 2	1	1	100%(mean=2.6)
• 3	1	1	100%(mean=4.0)
2010-2011			
• 1	6	6	100%(mean=2.50)
• 2	6	6	100%(mean=2.83)
• 3	6	6	100%(mean=4.50)*

<sup>1</sup> Present ideas in writing.

**Measurement Tool: GEA College Rubric General Education Objective(s):** 4, 5, 6

**Goal Results:** 

100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 4	3	0	0% (mean = 1.75)
• 5	3	3	100%(mean=3.92)
• 6	3	1	33%(mean=2.75)
2010-2011			
• 4	6	0	0%(mean=1.21)
• 5	6	5	83%(mean=3.54)
• 6	6	5	83%(mean=3.39)

<sup>4</sup> Demonstrate mathematical principles.

**Measurement Tool: GEA College Rubric** 

**General Education Objective(s):** 7, 8, 9

**Goal Results:** 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	3	3	100%(mean=4.0)
• 8	3	3	100%(mean=3.67)
• 9	3	3	100%(mean=3.5)

7. Read and analyze complex ideas.

8. Locate, evaluate and apply research information.

9. Evaluate and present well-reasoned arguments

**Measurement Tool:** 

**General Education Objective(s):** 

Goal Results:

GEA College Rubric- Critical Thinking-Science Evaluation

7, 8, 9

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing % Passing	
2010-2011			
• 7	6	6	100%(mean=2.67)
• 8	6	6	100%(mean=2.83)
• 9	6	6	100%(mean=2.67)

<sup>7.</sup> Identify and gather information.

Measurement Tool:

GEA College Rubric- Critical
Thinking-English Evaluation

General Education Objective(s): 7, 8, 9

Goal Results: 100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	6	6	100%(mean=3.00)
• 8	6	6	100%(mean=3.00)
• 9	6	6	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool: Writing Across the Curriculum

General Education Objective(s):

College Rubric
1

Goal Results: 90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	2(1)	2(2)	(14)	(2)
• 1.1.2	2	2(3)	(14)	(2)
• 1.1.3	2	2(6)	(10)	(3)
• 1.2.1	2(1)	1(5)	1(10)	(3)
• 1.2.2	2	2(6)	(12)	(1)
• 1.2.3	3	1(6)	(11)	(2)
• 1.3.1	4(2)	(10)	(7)	
• 1.3.2	3(4)	1(12)	(3)	
• 1.4.1		4(11)	(7)	(1)
• 1.4.2		4(11)	(7)	(1)

Provides a clear, concise thesis statement

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well developed and varied

Measurement Tool: General Education Objective(s): Goal Results: Critical Thinking College Rubric

6

90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Laboratory Science(No Lab Sci)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 6.1.1	2(2)	(4)	(13)	(2)
• 6.1.2	2(2)	(4)	(13)	(2)
• 6.1.3	1(1)	(5)	(15)	(1)
• 6.2.1	1(1)	1(5)	(14)	(1)
• 6.2.2	2(3)	(7)	(11)	
• 6.2.3	2(3)	(5)	(12)	(1)
• 6.3.1	2(1)	(4)	(13)	(3)
• 6.3.2	2(2)	(6)	(12)	(1)
• 6.3.3	2(2)	(5)	(13)	(1)

Identify and gather

Legend:

6.1.1 Asks insightful questions

6.1.2 Critiques content

6.1.3 Examines inconsistencies

Analyze and evaluate

6.2.1 Analyzes and evaluates thoroughly

6.2.2 Uses reasonable judgment

6.2.3 Critically discriminates between good and bad information

Synthesize and formulate conclusion

6.3.1 Discusses issues thoroughly and argues succinctly

6.3.2 Assimilates information

6.3.3 Justifies conclusion

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

General Education Objective(s): 1, 4-9
Goal Results: 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	7(39.6%)	1(54%)	7(30.7%)	7(32.4%)	7(43%)
2009-2010	2(23%)	1(85%)	3(33%)	2(31%)	2(36%)

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

Need to develop more precise assessment tools.

#### Goal

Implement a capstone project via a Capstone Class. Students enrolling in their last semester in the Animal Science program will be required to complete a Capstone class.

#### **Action Plan**

Introduce the appropriate paperwork to add the Capstone class to both options within Animal Science.

#### Results

After completing the necessary reporting, it seems even more critical that a capstone class is needed for assessment of graduating students. My data set grew this year, which is a positive, but closing the loop and implementing changes is a slow process. In regards, to assessment and improving our teaching baseline, I need to personally increase my standards when it comes to grading. I feel that I have improved, but I must be more stringent in the future to prepare my students for the university atmosphere.

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Need to develop additional and more precise assessment tools.

#### Goal

Continue to implement a capstone project via a Capstone Class. Students enrolling in their last semester in the Animal Science program will be required to complete a Capstone class.

#### **Action Plan**

Introduce the appropriate paperwork to add the Capstone class to both options within Animal Science by October 2011.

#### Results

To be presented and analyzed in 2011-2012 report.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT AUTOMOTIVE TECHNOLOGY 2010-2011

Mesalands Community College's Automotive Technology program prepares the student to enter the vast automotive service and repair field as an entry level technician. Upon completion of the program, career opportunities may include entry level positions such as service technician, specialist, service advisor, service dispatcher, parts sales advisor, sales representative, or crew member of a race team.

#### **Program Objectives/Competencies**

Upon completion of the Automotive Technology Associate Degree Program:

- 1. Demonstrate knowledge of automotive mechanical components and systems based on Automotive Service Excellence (ASE) standards.
- 2. Demonstrate knowledge of automotive electrical and electronic components and systems based on ASE standards.
- 3. Application of automotive mechanical systems repair skills based on industry standards.
- 4. Application of automotive electrical and electronic systems repair skills based on industry standards.

#### **General Education Competencies**

Upon completion of the Automotive Technology Associate Degree Program and in addition to the above-mentioned program objectives/competencies:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Automotive Technology assessment plan is in its second year and is addressed via a plan→do→study→adjust cycle of assessment that follows a two year program cycle.

### **Program Objectives Assessment Plan**

All program objectives are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
1. Demonstrate knowledge of automotive mechanical components and systems based on Automotive Service Excellence (ASE) standards.	<ul><li>CAT</li><li>Pre/Post-Test</li><li>ASE based Test</li></ul>	<ul> <li>AMT 101</li> <li>AMT 102</li> <li>AMT 121</li> <li>AMT 122</li> <li>AMT 201</li> <li>AMT 202</li> <li>AMT 211</li> <li>AMT 212</li> <li>AMT 221</li> <li>AMT 221</li> <li>AMT 231</li> <li>AMT 232</li> </ul>
2. Demonstrate knowledge of automotive electrical and electronic components and systems based on ASE standards.	<ul><li>CAT</li><li>Pre/Post-Test</li><li>ASE Based Test</li></ul>	• AMT 111 • AMT 112 • AMT 131 • AMT 132
3. Application of automotive mechanical systems repair skills based on industry standards.	<ul><li>CAT</li><li>Pre/Post-Test</li><li>ASE Based Test</li></ul>	<ul> <li>AMT 101</li> <li>AMT 102</li> <li>AMT 121</li> <li>AMT 122</li> <li>AMT 201</li> <li>AMT 202</li> <li>AMT 211</li> <li>AMT 212</li> <li>AMT 221</li> <li>AMT 221</li> <li>AMT 231</li> <li>AMT 232</li> </ul>

4. Application of	• CAT	• AMT 111
automotive electrical	Pre/Post-Test	• AMT 112
and electronic	ASE based Test	• AMT 131
systems repair skills		• AMT 132
based on industry		
standards.		

#### **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool: CAT – Plus/Delta

Program Objective(s): 1, 2, 3, 4

Results: (2009-2010) Students' biggest concern is the

need for more and newer training equipment.

(2010-2011) Students' biggest concern are the tools in the tool boxes that the college provides the students to work from. The students felt the tool boxes were inadequate and that the other students did not take care of the tool sets.

**Measurement Tool:** Pre/post Test **Program Objective(s):** 1, 2, 3, 4

Goal Results: 50% improvement

Reporting Period	Course	Pre Test Mean(N)	Post Test Mean (N)/# of Students Achieving Goal
2009-2010	AMT 101	56%(11)	78%(7)/ 7
	AMT 102	40%(11)	75%(7)/7
	AMT 111	45%(18)	71%(17)/12
	AMT 112	6%(18)	48%(17)/6
	AMT131	40%(16)	73%(15)/10
	AMT 132	12%(16)	70%(15)/11
	AMT 231	47%(11)	75%(7)/6
	AMT 232	56%(11)	81%(7)/6

Reporting Period	Course	Pre Test Mean(N)	Post Test Mean (N)/# of Students Achieving Goal
2010-2011	AMT 100	62%(4)	77%(4)/3
	AMT 201	36%(3)	90%(3)/3
	AMT 202	56%(3)	90%(3)/3
	AMT 211	60%(3)	93%(3)/3
	AMT 212	66%(3)	90%(3)/3
	AMT 121	67%(11)	83%(8)/7
	AMT 122	48%(11)	85%(8)/8
	AMT 221	55%(6)	84%(5)/5
	AMT 222		

**Measurement Tool: ASE Based Test** 

Program Objective(s): Goal Results: 1, 2, 3, 4

70% pass rate/70% cut score

Reporting Period	Course	Category (ASE ID#)	#Attempting/ # Achieving	%Achieving/ % Class Mean
	AMT 101	Suspension and Steering (A4)	11/7	63%/53%
	AMT 102	Brakes (A5)	11/7	63%/53%
	AMT 111	Electrical/ Electronic Systems (A6)	18/12	66%/73%
	AMT 112	Electrical/ Electronic Systems (A6)	18/12	66%/73%
2009-2010	AMT 131	Electrical/ Electronic Systems (A6)	16/13	81%/76%
	AMT 132	Electrical/ Electronic Systems (A6)	16/13	81%/76%
	AMT 231	Heating and A/C (A7)	11/7	63%/51%
	AMT 232	Heating and A/C (A7)	11/7	63%/51%

Reporting Period	Course	Category (ASE ID#)	#Attempting/ # Achieving	%Achieving/ % Class Mean
	AMT 201	Manual Drivetrain & Axles (A3)	3/0	0/51%
	AMT 202	Manual Drivetrain & Axles (A3)	3/0	0/51%
	AMT 211	Automatic Transmission/ Transaxle (A2)	3/2	66%/73%
2010-2011	AMT 212	Automatic Transmission/ Transaxle (A2)	3/2	66%/73%
	AMT 121	Engine Performance (A8)	11/7	63%/30%
	AMT 122	Engine Performance (A8)	11/7	63%/30%
	AMT 221	Engine Repair (A1)	12/4	33%/53%
	AMT 222	Engine Repair (A1)	12/4	33%/53%

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.

The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Measurement Tools	Courses In Which General Education Competences Are Presented and/or Measured
GEA College Rubrics CAAP Writing Across the Curriculum College Rubric Oral Presentation College Rubric	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> <li>AMT 111</li> <li>AMT 112</li> <li>AMT 131</li> <li>AMT 132</li> <li>AMT 101</li> <li>AMT 102</li> <li>AMT 231</li> <li>AMT 231</li> <li>AMT 222</li> <li>AMT 221</li> <li>AMT 222</li> <li>AMT 121</li> <li>AMT 201</li> <li>AMT 202</li> <li>AMT 211</li> <li>AMT 212</li> </ul>
GEA College Rubrics     CAAP	Lab Science Requirement
GEA College Rubrics     CAAP	<ul> <li>ACS 100</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> </ul>
	GEA College Rubrics CAAP Writing Across the Curriculum College Rubric Oral Presentation College Rubric  GEA College Rubrics CAAP  GEA College Rubrics GEA College Rubrics

#### **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

Measurement Tool: GEA College Rubric

General Education Objective(s): 1, 2, 3

Goal Results: 100% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	1	1	100%(mean=2.80)
• 2	1	0	0%(mean=1.75)
• 3	1	1	100%(mean=4.25)*

<sup>1</sup> Present ideas in writing.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 4, 5, 6

Goal Results: 100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	1	0	0%(mean=1.25)
• 5	1	1	100%(mean=3.00)
• 6	1	0	0%(mean=2.50)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool:GEA College RubricGeneral Education Objective(s):Critical Thinking-Science

Evaluation

Goal Results: 100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.00)
• 8	1	1	100%(mean=3.00)
• 9	1	1	100%(mean=2.00)

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

7. Identify and gather information.

8. Analyze and evaluate information.

9. Synthesize and formulate conclusions.

Measurement Tool: General Education Objective(s):

**Goal Results:** 

GEA College Rubric Critical Thinking-English 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=2.00)
• 8	1	1	100%(mean=2.00)
• 9	1	1	100%(mean=2.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	1(28%)	N/A	1(33%)	1(10%)	1(37%)
2009-2010	1(14%)	N/A	1(12%)	1(6%)	1(21%)

Measurement Tool: Writing Across the Curriculum

College Rubric

General Education Objective(s):

Goal Results: 90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	1(2)		(1)	(5)
• 1.1.2	1(3)			(6)
• 1.1.3	1(3)		(1)	(5)
• 1.2.1	1(2)	(3)	(1)	(3)
• 1.2.2	1(1)	(3)	(1)	(4)
• 1.2.3	1(1)	(4)	(1)	(3)
• 1.3.1	1(5)			(4)

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

• 1.3.2	1(5)		(4)
• 1.4.1	1(6)	(1)	(2)
• 1.4.2	1(6)	(1)	(2)

Provides a clear, concise thesis statement

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well-developed and varied

Measurement Tool:
General Education Objective(s):
Goal Results:

2

90% "Excellent(4)"/"Proficient(3)"/

Oral Presentation College Rubric

"Adequate(2)"

Legend:

COMM 102(No COMM 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1	1(1)	1(1)	1(1)	1(2)
• 2.1.2	(1)	2	1(1)	1(3)
• 2.1.3	(1)			4(4)
• 2.2.1		1(2)	2(2)	1(1)
• 2.2.2	1(1)	1	1(2)	1(2)
• 2.2.3	1(1)	2(2)	(2)	1
• 2.3.1		1(1)	1(1)	2(3)
• 2.3.2		(1)	2(2)	2(2)
• 2.3.3	1(1)			3(4)
• 2.4.1	(2)	2(2)	2(1)	
• 2.4.2		2(4)	2(1)	
• 2.4.3	1(1)	2(3)	1(1)	
• 2.5.1		1(3)		3(2)
• 2.5.2	(1)	1	(2)	3(2)
• 2.5.3	1(2)	(1)		3(2)

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

This program needs newer training equipment to train and work on.

#### Goal

The goal is to continue to work with the budget available, donations, and to compete in Ford/AAA and SkillsUSA programs to update and add to the training equipment.

#### **Action Plan**

The Automotive Instructor will meet with the Dean of Instructional Service to discuss needs and available budget. Also the Automotive Instructor will meet with industry partners for donations and will continue to compete in SkillsUSA and Ford/AAA to make more partners if possible.

#### Results

The Modis Snap-on scanner was updated with the latest software during the summer of 2010 and we added a 1997 Dodge minivan with OBD II system as a training vehicle. We did not compete in SkillsUSA due to a lack of support from Student Services; also we did not compete in the Ford/AAA program due to a lack of interest from the students in the dual enrollment program. Perkins Grant has been held off until past mistakes have timed out and we should be able to write another grant in the next year or two. Also with the state of the economy, budget and donations were down.

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

The Automotive Technology Program needs to continue to seek newer training equipment to train and work on. Also, to prepare the students for entry into industry, students will need to provide their own basic tool sets and tool storage boxes.

#### Goal

The goal is to continue to work with the budget available, seek grants and donations when the time is right and to compete in Ford/AAA and SkillsUSA programs to update and add to the training equipment. Students will need to bring their own basic tool sets and tool storage boxes.

#### **Action Plan**

The Automotive Instructor will meet with the Dean of Academic Affairs to discuss needs and available budget. Also, the Automotive Instructor will meet with industry partners for donations and will continue to compete in SkillsUSA and Ford/AAA to make more partners. The Automotive Instructor will meet with the Dean of Academic Affairs to discuss the possibility of a design plan to allow students to supply their own basic tool sets and tool storage boxes.

#### Results

To be presented and analyzed in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT BUILDING TRADES 2010-2011

The Building Trades program provides a broad education towards entry-level employment opportunities in the construction field. Beginning courses concentrate on basic techniques including carpentry, construction safety, blueprint reading and job site etiquette. Later, students participate in building a home from the planning through completion phases. They also have the opportunity to learn sophisticated design skills with new Computer Aided Design (CAD). Internships with local contractors are available for students to gain experience in the field.

#### **Program Objectives/Competencies**

Upon completion of the Building Trades Associate Degree Program:

- 1. The student will recognize and demonstrate basic knowledge of general construction industry practices and policies.
- 2. The student will illustrate knowledge of estimating, project scheduling, contract documents and payment acquisitions.
- 3. The student will demonstrate basic knowledge of financial management, project safety management and exemplify effective employee relations.
- 4. The student will demonstrate abilities and skills appropriate to basic general construction.
- 5. The student will recognize and apply basic construction theory and mathematical principles in application of building design and technique.
- 6. The student will recognize and exhibit positive employability characteristics.

## **General Education Competencies**

Upon completion of the Building Trades Associate Degree Program and in addition to the above-mentioned program objectives/competencies:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

 Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Building Trades assessment plan is in its second year and is addressed via a plan→do→study→adjust cycle that begins every fall term and follows one Building Trades cohort from first term through graduation.

#### **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

	Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
1.	The student will recognize and demonstrate basic knowledge of general construction industry practices and policies.	<ul> <li>National Center for Construction Education and Research (NCCER) Curriculum Written Tests</li> <li>NCCER Curriculum Performance Tests</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	•BT 101 •BT 102 •BT 111 •BT 115 •BT 112 •BT 116 •BT 121 •BT 122 •BT 201 •BT 202 •BT 215 •BT 250 •BT 260
2.	The student will illustrate knowledge of estimating, project scheduling, contract documents and payment acquisitions.	<ul> <li>Estimating Project</li> <li>NCCER Curriculum Written Tests</li> <li>NCCER Curriculum Performance Tests</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	•BT 116 •BLAW 202 •BT 121 •BT 202 •BT 215 •BT 260
3.	The student will demonstrate basic knowledge of financial management, project safety	<ul> <li>Project Management Portfolio</li> <li>NCCER Curriculum Written Tests</li> <li>NCCER Curriculum</li> </ul>	•BLAW 202 •BT 116 •BT 121 •BT 202 •BT 215

	management and exemplify effective employee relations.	Performance Tests • Pre/Post-Test • Oral Tests	BT 260     Soc. Sci. Requirement
	The student will demonstrate abilities and skills appropriate to basic general construction.	<ul> <li>Performance Profile</li> <li>NCCER Curriculum Written Tests</li> <li>NCCER Curriculum Performance Tests</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	•BT 101 •BT 102 •BT 111 •BT 115 •BT 112 •BT 116 •BT 121 •BT 122 •BT 201 •BT 202 •BT 250
5.	The student will recognize and apply basic construction theory and mathematical principles in application of building design and technique.	<ul> <li>Blueprint Evaluation</li> <li>NCCER Curriculum Written Tests</li> <li>NCCER Curriculum Performance Tests</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	• ACS 100 • BT 111 • BT 115 • BT 112 • BT 116 • BT 121 • BT202 • BT 215 • BT 250 • MATH 101 • Science Requirement
6.	The student will recognize and exhibit positive employability characteristics.	<ul> <li>Daily Contacts</li> <li>NCCER Curriculum Written Tests</li> <li>NCCER Curriculum Performance Tests</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	• ACS 100 • BT 111 • BT 121 • BT 202 • BT 215 • BT 260 • COMM 102 • Soc. Sci. Requirement

# **Program Objective Results**

This section presents the raw data results of those measurement tools identified in the second column above.

Measurement Tool: NCCER Curriculum Written Exams\*

**Program Objective(s):** 1, 2, 3, 4, 5, and 6

**Goal Results:** 90% pass rate/70% cut score

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2010-2011			
<ul><li>Construction Technology III</li><li>Interior Finishing</li></ul>	11	10	91% (Mean=81%)
9	/	6	86% (Mean=78%)
• Exterior Finishing	12	0	0% (Mean=0%)
Construction Technology IV	10	0	0% (Mean=0%)
Project Management	3	1	33% (Mean=86%)

<sup>\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the knowledge level of an individual in a specific craft area.

Measurement Tool: NCCER Curriculum Written Exams\*

**Program Objective(s):** 1, 2, 3, 4, 5, and 6

Goal Results: 90% pass rate/70% cut score

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2009-2010			
<ul> <li>Intro. To Building Trades</li> </ul>	9	6	67% (Mean=71%)
<ul> <li>Construction Safety</li> </ul>	8	7	88% (Mean=73%)
<ul> <li>Construction Technology I</li> </ul>	8	8	100% (Mean=86%)
Construction Technology II	9	6	67% (Mean=71%)
Construction Technology III	2	2	100% (Mean=86%)
Fundamentals of Framing	8	8	100% (Mean=86%)
Interior Finishing	8	6	75% (Mean=76%)
Blueprint Interpretations	8	7	88% (Mean=79%)
Project Management	17	15	88% (Mean=89%)

<sup>\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the knowledge level of an individual in a specific craft area.

Measurement Tool: NCCER Curriculum Performance Tests\*\*

**Program Objective(s):** 1, 2, 3, 4, 5, and 6

Goal Results: 90% pass rate/100% cut score

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2010-2011			
Construction Technology III	11	10	91% (Mean=100%)
Interior Finishing	7	6	86% (Mean=100%)
Exterior Finishing	12	12	100% (Mean=100%)
Construction Technology IV	10	12	100%
Serious design recommendary rv			(Mean=100%)

Measurement Tool: NCCER Curriculum Performance Tests\*\*

**Program Objective(s):** 1, 2, 3, 4, 5, and 6

**Goal Results:** 90% pass rate/100% cut score

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2009-2010			
<ul> <li>Intro. To Building Trades</li> </ul>	9	8	89% (Mean=100%)
Construction Safety	8	7	88% (Mean=100%)
Construction Technology I	8	8	100% (Mean=100%)
Construction Technology II	9	6	67% (Mean=100%)
<ul> <li>Fundamentals of Framing</li> </ul>	8	8	100% (Mean=100%)
Interior Finishing	8	6	75% (Mean=100%)
Blueprint Interpretations	8	7	88% (Mean=100%)

<sup>\*\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the skill level of an individual in a specific craft area.

Measurement Tool:Pre/Post TestProgram Objective(s):1, 2, 3, 4, 5, and 6Goal Results:50% Improvement

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
<ul> <li>2010-2011</li> <li>Construction Technology III</li> <li>Interior Finishing</li> <li>Exterior Finishing</li> <li>Construction Technology IV</li> </ul>	7	2	29% (Mean=50%)
	7	1	14% (Mean=48%)
	7	2	29% (Mean=50%)
	7	1	14% (Mean=48%)

<sup>\*\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the skill level of an individual in a specific craft area.

Measurement Tool:Pre/Post TestProgram Objective(s):1, 2, 3, 4, 5, and 6Goal Results:50% Improvement

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2009-2010			
<ul> <li>Introduction to Building Trades</li> </ul>	9	6	69%
Construction Safety	8	6	71%
Construction Technology I	8	6	80%
	9	6	68%

<sup>\*\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the skill level of an individual in a specific craft area.

Construction Technology II	2	1	81%
Construction Technology III	8	6	79%
Fundamentals of Framing	8	6	75%
Interior Finishing	8	6	78%
Blueprint Interpretations	17	14	85%
Project Management			

**Measurement Tool:** Oral Tests

**Program Objective(s):** 1, 2, 3, 4, 5, and 6 **Goal Results:** 50% Improvement

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2010-2011			
Construction Technology III	10	8	80% (Mean=90%)
Interior Finishing	7	5	71% (Mean=82%)
Exterior Finishing	12	9	75% (Mean=84%)
Construction Technology IV	10	6	60% (Mean=78%)
Project Management	3	3	100%(Mean=95%)

<sup>\*\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the skill level of an individual in a specific craft area.

Measurement Tool: Project Management Portfolio

**Program Objective(s):** 1, 2, 3, 4, 5, and 6 **Goal Results:** 50% Improvement

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2010-2011     Construction Technology IV	3	1	33%

<sup>\*\*</sup>These National Center for Construction Education and Research (NCCER) assessments evaluate the skill level of an individual in a specific craft area.

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.

The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul> <li>College Rubric</li> <li>Program-Specific Rubric</li> <li>GEA</li> <li>NCCER Curriculum Written Tests</li> <li>NCCER Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Estimating Project</li> <li>Project Management Portfolio</li> <li>Performance Profile</li> <li>Blueprint Evaluation</li> <li>Daily Contacts</li> <li>Class Presentations</li> </ul>	<ul> <li>ACS 100</li> <li>BLAW 202</li> <li>BT 102</li> <li>BT 112</li> <li>BT 116</li> <li>BT 121</li> <li>BT 202</li> <li>BT 215</li> <li>BT 260</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Science Requirement</li> <li>Social Science Requirement</li> </ul>
Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>College Rubric</li> <li>Program-Specific Rubric</li> <li>GEA</li> </ul>	<ul> <li>BT 101</li> <li>BT 102</li> <li>BT 111</li> <li>BT 112</li> <li>BT 115</li> <li>BT 116</li> <li>BT 121</li> <li>BT 201</li> <li>BT 202</li> <li>BT 215</li> <li>BT 250</li> <li>MATH 101</li> <li>Lab Science Requirement</li> <li>Social Science/Humanities Requirement</li> </ul>
<ul> <li>Critical Thinking</li> <li>7. Read and analyze complex ideas.</li> <li>8. Locate, evaluate and apply research information.</li> <li>9. Evaluate and present</li> </ul>	<ul> <li>College Rubric</li> <li>Program-Specific Rubric</li> <li>GEA</li> <li>Estimating Project</li> <li>Project Management</li> </ul>	• ACS 100 • BT 111 • BT 115 • BT 112 • BT 116 • BT 121

well-reasoned	Portfolio	• BT202
arguments.	Performance Profile	• BT 215
	<ul> <li>Blueprint Evaluation</li> </ul>	• BT 250
	<ul> <li>Daily Contacts</li> </ul>	• COMM 102
	<ul> <li>Class Presentations</li> </ul>	• MATH 101
		Lab Science Requirement
		Social Science/Humanities
		Requirement

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College-created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:** GEA College Rubric

**General Education Objective(s):** 1, 2, 3

100% "excellent (4)", "proficient **Goal Results:** 

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 1	1	1	100%(mean=2.17)
• 2	1	1	100%(mean=2.73)
• 3	1	1	66%(mean=2.31)

- 1 Present ideas in writing.
- 2 Present ideas orally according to standard usage.3 Demonstrate application of information technology.

**GEA College Rubric Measurement Tool:** 

**General Education Objective(s):** 

100% "excellent (5)", "proficient **Goal Results:** 

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 4	1	0	0% (mean=1.25)
• 5	1	1	100%(mean=3.25)
• 6	1	1	100%(mean=3.75)

<sup>4</sup> Demonstrate mathematical principles.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 7, 8, 9

Goal Results: 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	1	1	100%(mean=3.5)
• 8	1	1	100%(mean=3.75)
• 9	1	1	100%(mean=3.5)

7. Read and analyze complex ideas.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2009-2010	2(23%)	1(54%)	2(52%)	2(37%)	2(43%)

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

Program objectives 1 and 5 suffered in the 2009-2010 semesters due to emphasis put on the completion of the Project House to meet the HUD grant time constraints.

#### Goal

The goal for the 2010-2011 academic year is to increase the pass rate to 90% and the cut score to 70% for all classes relevant to program objectives 1 and 5.

#### **Action Plan**

Consistent classroom time will be given proper priority along with "hands on" jobsite training.

#### Results

Not reported.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

# PDSA CYCLE GOALS (2010-2011)

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Not reported.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT BUSINESS ADMINISTRATION 2010-2011

The Business Department at Mesalands Community College offers students a wide range of programs leading towards associate degrees. Associate of Applied Science degrees are awarded to students completing the degree plan requirements in our Business Administration and Business Office Technology program. These students are prepared to enter the workforce. An Associate of Arts degree is awarded to students who complete the Business Administration degree with plans to pursue a four-year degree.

The core courses of the Business Administration program allow students to acquire skills in accounting, business communications, business law, computers, economics, and management. Graduates of the Business Administration program are exposed to a variety of disciplines and given the opportunity to improve and enhance their interpersonal skills, critical thinking and problem-solving skills.

#### **Program Objectives/Competencies**

Upon completion of the Business Associate Degree Programs in Business Administration:

- 1. The student will demonstrate proficiency in public speaking and interpersonal communication.
- 2. The student will demonstrate the ability to create and present a final presentation with supportive documents.
- 3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.
- 4. The student will demonstrate the ability to conduct an environmental scan.

#### **General Education Competencies**

Upon completion of the Business Associate Degree Programs and in addition to the above-mentioned program objectives/competencies:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3) Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Business assessment plan is in its second year and follows one Business cohort from first term (fall) through graduation.

#### **Program Objectives Assessment Plan**

All program objectives are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

	Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
1.	The student will demonstrate proficiency in public speaking and interpersonal communication.	<ul><li>GEA results</li><li>Course exams</li><li>CATs</li><li>Pre/Post-Tests</li><li>Speeches</li></ul>	• ACS 100 • BUS 221
2.	The student will demonstrate the ability to create and present a final presentation with supportive documents.	<ul> <li>GEA results</li> <li>Course exams</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Research papers</li> <li>Case analyses</li> <li>Business Plan</li> </ul>	<ul> <li>ACS 100</li> <li>ENG 102</li> <li>ENG 104</li> <li>COM 102</li> <li>BUS 221</li> <li>MGT 113</li> </ul>
3.	The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.	<ul><li>GEA results</li><li>Course exams</li><li>CATs</li><li>Pre/Post-Test</li><li>Case analyses</li></ul>	<ul> <li>ACS 100</li> <li>MGT 253</li> <li>ENG 102</li> <li>ENG 104</li> <li>ECON 251</li> <li>ECON 252</li> </ul>
4.	The student will demonstrate the ability to conduct an environmental scan.	<ul> <li>GEA results</li> <li>Course exams</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Case analyses</li> <li>Business Plan</li> </ul>	<ul><li>MGT 253</li><li>MGT 113</li><li>BUS 101</li></ul>

## **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** BUS 221 Final Presentation

Program Objective: 1

**Goal Results:** 90% pass rate; cut score is 75%<sup>1</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	3	3	100% (mean = 88%)
2010-2011	7	7	100% (mean = 95%)

**Measurement Tool:** MGT 115 Business Plan

Program Objective: 2

**Goal Results:** 70% pass rate; cut score is 70%<sup>2</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	9	6	67% (mean = 78%)
2010-2011	15	13	87% (mean = 84%)

Measurement Tool: ECON 251 Final Exam

Program Objective: 3

**Goal Results:** 70% pass rate; cut score is 70%<sup>3</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	10	10	100% (mean = 85%)
2010-2011	6	6	100% (mean = 89%)

<sup>&</sup>lt;sup>1</sup> After evaluation of the first year's results, adjustments were made to reflect more realistic expectations. BUS 221 Final Presentation pass rate goal was lowered from one hundred percent to ninety percent and the cut score was raised from seventy percent to seventy-five percent.

<sup>&</sup>lt;sup>2</sup> Pass rate goal lowered from one hundred percent to seventy percent; cut score unchanged.

<sup>&</sup>lt;sup>3</sup> Pass rate goal lowered from one hundred percent to seventy percent; cut score unchanged.

**Measurement Tool:** MGT 115 Business Plan

Program Objective: 4

**Goal Results:** 70% pass rate; cut score is 70%<sup>4</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	9	6	67% (mean = 78%)
2010-2011	15	13	87% (mean = 84%)

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

<sup>4</sup> Pass rate goal lowered from one hundred percent to seventy percent; cut score unchanged.

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	General Education Competencies	Measurement Tools	Courses In Which General Education Competencies Are Presented and/or Measured
	Communication	GEA College Rubric	• ACS 100
1.	Present ideas in	• CAAP	• COM 102
	writing.	• CAT	• CIS 101
2.	Present ideas orally	Class Presentations	• ENG 102
	according to standard	• Exams	• ENG 104
3	usage. Demonstrate		• Lab Science
٥.	application of		Requirement
	information		Social Sciences/
	technology.		Humanities
	Quantitative and	- CEA Collogo Bubrio	Requirement  • BUS 103
	Scientific Reasoning	GEA College Rubric     CAAP	• MATH 101
	Demonstrate	• Exams	• ACCT 111
	mathematical	Discussion Posts	• ECON 251
	principles.	• CATs	• ECON 252
5.	Demonstrate scientific	Pre/Post-Test	Lab Science
	reasoning.	1 10/1 001 1001	Requirement
6.	Apply scientific		1000
	methods to the inquiry		
	Process.	OFA Callaga Dub 1	100 100
7	Critical Thinking Read and analyze	GEA College Rubric     CAAB	• ACS 100
' :	complex ideas.	• CAAP	• CIS 101
8	Locate, evaluate and	Research paper	• COM 102
.	apply research		• ECON 251 • ECON 252
	information.		ECON 232
9.	Evaluate and present		
	well-reasoned		
	arguments.		

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**GEA College Rubric Measurement Tool: General Education Objective(s):** 1, 2, 3

80% "excellent (4)", "proficient **Goal Results:** (3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	2	2	100%(mean=3.00)
• 2	3	3	100%(mean=2.67)
• 3	2	2	100%(mean=5.00)*
2009-2010			
• 1	4	4	100%(mean=3.13)
• 2	4	4	100%(mean=3.32)
• 3	4	4	100%(mean=4.50)*

<sup>1</sup> Present ideas in writing.

**GEA College Rubric Measurement Tool:** 

**General Education Objective(s):** 4, 5, 6

90% "excellent (5)", "proficient (4)" **Goal Results:** or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	3	2	67%(mean=3.0)
• 5	3	2	67%(mean=3.58)
• 6	3	2	67%(mean=3.50)
2009-2010			
• 4	4	1	25% (mean=1.78)
• 5	4	3	75%(mean=3.84)
• 6	4	4	100%(mean=3.67)

<sup>4</sup> Demonstrate mathematical principles. 5 Demonstrate scientific reasoning.

<sup>2</sup> Present ideas orally according to standard usage.3 Demonstrate application of information technology.

<sup>\*</sup>Based on a 5 point scale.

<sup>6</sup> Apply scientific methods to the inquiry process.

**Measurement Tool:** 

**Goal Results:** 

General Education Objective(s):

GEA College Rubric Critical Thinking-Science

**Evaluation** 

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	2	67%(mean=3.00)
• 8	3	2	67%(mean=3.00)
• 9	3	3	100%(mean=2.00)

<sup>7.</sup> Identify and gather information.

GEA College Rubric **Measurement Tool:** General Education Objective(s): Critical Thinking-English

Evaluation

**Goal Results:** 

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	2	67%(mean=2.67)
• 8	3	2	67%(mean=2.67)
• 9	3	2	67%(mean=2.67)

<sup>7.</sup> Identify and gather information.

**Measurement Tool: GEA College Rubric** General Education Objective(s): 7, 8, 9

80% "excellent (5)", "proficient **Goal Results:** (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	4	4	100%(mean=4.19)
• 8	4	3	75%(mean=3.13)
• 9	4	4	100%(mean=3.38)

<sup>7.</sup> Read and analyze complex ideas.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

Measurement Tool: ACT Collegiate Assessment

of Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-11	6(66%)	5(70%)	6(60%)	6(70.8%)	6(82.3%)
2009-10	3(27.67%)	1(66%)	3(34.33%)	3(37.33%)	3(48%)

Measurement Tool: Writing Across the Curriculum

College Rubric – COM 102 Post-Test

General Education Objective(s): 1

Goal Results: 90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1		4(4)		
• 1.1.2		4(4)		
• 1.1.3		4(4)		
• 1.2.1		4(4)		
• 1.2.2		4(4)		
• 1.2.3		4(4)		
• 1.3.1		4(4)		
• 1.3.2		4(4)		
• 1.4.1		4(4)		
• 1.4.2		4(4)		

#### Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well-reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

#### Correctly incorporates outside sources.

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
- 1.4.2 Sentence structure and vocabulary are well-developed and varied.

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

#### **Problem Area**

Although the sample is small, many students still fail to write effective business plans despite the wealth of resources available. This is unlikely to change because the majority of students who write unacceptable business plans simply fail to put forth the requisite effort. Those who submit drafts and other work throughout the semester generally produce acceptable results.

The case analyses required in MGT 253 are good assessment tools. Unfortunately, both students who enrolled in the course during this assessment period failed to complete the case analyses.

#### Goal

As always, the goal is for students to continually improve their writing and enhance their broad critical thinking skills.

#### **Action Plan**

In 2010-11, there will also be more opportunities for students to critique each other's writing. There will also be continued use of online discussion posts in ECON 251 that require specific feedback based on the use of writing and reasoning skills.

#### Results

As during the 2009-2010 cycle, some students failed to write effective business plans. Collectively, however, there were fewer failures despite more attempts. There was a success rate increase from sixty-seven to eight-seven percent. The two failed attempts resulted from a lack of effort. The higher rate of success was due in large part to a different student population. Both the mean age and academic experience of the students attempting business plans was higher in 2010-11 than in 2009-2010.

The capstone MGT 253 (Business Policy) case analyses mentioned in the 2009-2010 report yielded a much different result. Five students averaged a score of ninety-two percent on the case analyses. This is a good indication that capstone students can effectively complete an environmental scan and make recommendations based upon that scan.

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Although the business plans were much better, many students still struggle to write effectively. One student who failed the business plan displayed signs of severe dyslexia. He was strongly encouraged by multiple college employees to take advantage of resources in the Educational Services Center.

#### Goal

The 2009-2010 report stated that the goal is always to continuously help students improve their writing and critical thinking skills. That is still true. During 2010-11, there was heightened instructional emphasis on organization of subject matter and class time as a means to that end. In other words, more effective organization (e.g., detailed calendars and chapter summaries) was expected to-and did, in fact-create more time for writing assignments and critical discussions on current business topics.

#### **Action Plan**

In 2011-2012, the emphasis will be on using technology to provide immediate feedback on homework assignments via Aplia and CourseMate. Not only will problem areas be more apparent before class meetings (leading to more focused and effective discussions), but students will be able to develop improved critical thinking skills through interactive decision-making exercises.

#### Results

To be presented and analyzed in 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT BUSINESS OFFICE TECHNOLOGY 2010-2011

The Business Department at Mesalands Community College offers students a wide range of programs that lead to the award of an associate degree. Associate of Applied Science degrees are awarded to students completing the degree plan requirements in our Business Administration and Business Office Technology program.

Advances in technology have increased the need for highly-skilled office employees who have the necessary training and confidence required to work with computer hardware and software, as well as office equipment. The Business Office Technology program has two options: General Office and Software Applications Specialist.

#### **Program Objectives/Competencies**

Upon completion of the Business Associate Degree Programs:

- 1. The student will demonstrate proficiency in the software applications most often used by industry (i.e., word processing, spreadsheet applications, database management, and presentations).
- 2. The student will demonstrate the ability to create and present a final presentation with supportive documents.
- 3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.

#### **General Education Competencies**

Upon completion of the Business Associate Degree Programs and in addition to the above mentioned program objectives/competencies:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Business assessment plan is in its second year and follows one Business cohort from first term (fall) through graduation.

# **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
1. The student will demonstrate proficiency in the software applications most often used by industry (i.e., word processing, spreadsheet applications, database management, and presentations).	<ul> <li>GEA results</li> <li>Exams</li> <li>CATs</li> <li>Pre/Post-Test</li> </ul>	<ul><li>CIS 101</li><li>CIS 201</li><li>CIS 202</li><li>BUS 203</li><li>BUS 110</li></ul>
2. The student will demonstrate the ability to create and present a final presentation with supportive documents.	<ul><li>GEA results</li><li>Exams</li><li>CATs</li><li>Pre/Post-Test</li></ul>	• ACS 100 • ENG 102 • ENG 104 • COM 102
3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.	<ul><li>GEA results</li><li>CATs</li><li>Pre/Post-Test</li><li>Oral Tests</li></ul>	<ul><li>ACS 100</li><li>ENG 102</li><li>ENG 104</li><li>COM 102</li><li>MATH 101</li></ul>

## **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool: CIS 101 Final Exam (Integration)

Program Objective: 1

Goal Results: 100% pass rate; cut score is 70%

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	6	6	100% (mean=91%)
2010-2011	20	20	100% (mean = 93.75%)

**Measurement Tool:** BUS 221 Final Presentation

Program Objective: 2

**Goal Results:** 100% pass rate; cut score is 70%

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	3	3	100% (mean=88%)
2010-2011	7	7	100% (mean = 95%)

Measurement Tool: COM 102 Final Exam

Program Objective: 3

**Goal Results:** 100% pass rate; cut score is 70%

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	3	3	100% (mean=91%)
2010-2011			

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.

The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	• ACS 100 • COM 102
<ol><li>Present ideas orally according to standard usage.</li></ol>	<ul><li>CAT</li><li>Class Presentations</li></ul>	• CIS 101 • ENG 102

Demonstrate application of information technology.	• Exams	<ul> <li>ENG 104</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> </ul>
Quantitative and Scientific	GEA College Rubric	• BUS 103
Reasoning	• CAAP	• MATH 101
4. Demonstrate	• Exams	• ACCT 110
mathematical principles.	<ul> <li>Discussion Posts</li> </ul>	Lab Science
5. Demonstrate scientific	• CATs	Requirement
reasoning.	<ul><li>Pre/Post-Test</li></ul>	
6. Apply scientific methods		
to the inquiry process.		
Critical Thinking	GEA College Rubric	• ACS 100
7. Read and analyze	• CAAP	• CIS 101
complex ideas.	<ul> <li>Research paper</li> </ul>	• COM 102
8. Locate, evaluate and		
apply research		
information.		
Evaluate and present		
well-reasoned		
arguments.		

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 1, 2, 3

Goal Results: 80% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 1	1	0	100%(mean=2.25)
• 2	1	1	100%(mean=3.0)
• 3	1	1	100%(mean=4.00)

<sup>1</sup> Present ideas in writing.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric

**General Education Objective(s):** 4, 5, 6 **Goal Results:** 

90% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 4	1	0	0% (mean = 1.0)
• 5	1	1	100%(mean=3.5)
• 6	1	0	100%(mean=1.75)

<sup>4</sup> Demonstrate mathematical principles.

**GEA College Rubric Measurement Tool:** 

**General Education Objective(s):** 7, 8, 9

80% "excellent (5)", "proficient **Goal Results:** (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	1	1	100%(mean=3.75)
•8	1	0	0%(mean=2.5)
• 9	1	1	100%(mean=3.25)

<sup>7.</sup> Read and analyze complex ideas.

**Measurement Tool: ACT Collegiate Assessment of** 

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

Legend: n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	2(22%)	N/A	2(32.5%)	2(28.5%)	2(20.5%)
2009-2010	1(6%)	N/A	1(6%)	1(0%)	1(4%)

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Locate, evaluate and apply research information.9. Evaluate and present well-reasoned arguments

**Measurement Tool:** Writing Across the Curriculum

College Rubric -COM 102 Post-Test

**General Education Objective(s):** 

90% "Excellent(4)"/"Proficient(3)"/ **Goal Results:** 

"Adequate(2)"

ENG 102(No ENG 102) Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1		1(0)		
• 1.1.2				
• 1.1.3		1(0)		
		1(0)		
• 1.2.1				1(0)
• 1.2.2		1(0)		
• 1.2.3			1(0)	
• 1.3.1		1(0)		
• 1.3.2			1(0)	
• 1.4.1				1(0)
• 1.4.2			1(0)	

Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well-reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
- 1.4.2 Sentence structure and vocabulary are well-developed and varied.

# PDSA CYCLE RESULTS (2009-2010)

#### **ANALYSIS**

**Problem Area:** Although one student is not a sufficient sample, the particular student who completed the CAAP did poorly. She was particularly nervous about the testing despite assurances that she would graduate regardless of the outcome.

**Goal:** As always, there is a goal to continuously improve student writing.

**Action Plan:** In 2010-11, there will be more interaction with the librarian on research methods and techniques so that students have more time to focus on the actual writing. There will also be more opportunities for students to critique each other's writing.

#### Results:

The previous action plan called for increased interaction with the librarian. Although this was successful during the fall, she resigned during the academic year. Other tools, such as detailed matrices and directed research efforts proved effective.

The CIS 101 final exam was an integration exercise. Although the number of testing students was greater and a couple of students barely met the passing standard, all students were able to create a satisfactory document using multiple software applications.

The final presentations in BUS 221 were markedly better than the initial presentations. Furthermore, students showed consistent improvement from one speech to the next. Each student was required to actively participate in peer review and students were graded on improvement. This method proved effective

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Many students still struggle with time management in the online CIS 101 course despite detailed schedules and frequent messages regarding progress or lack thereof.

#### Goal

As with the Business Administration program, more effective organization (e.g., detailed calendars and chapter summaries) did, in fact, create more time for writing assignments and critical discussions on current business topics.

#### **Action Plan**

In 2011-2012, there will be a continued use of learning aids but also an increased onus on students to bring outside research to the classroom and discuss their findings in groups. This proved particularly effective in BUS 221 during the 2010-11 cycle.

#### Results

To be presented and analyzed in 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT DIESEL TECHNOLOGY 2010-2011

Mesalands Community College's Diesel Technology program prepares the student to enter a vast diesel service and repair field as an entry level technician. Upon completion of the program, career opportunities may include entry level positions such as service technician (in the following fields: diesel powered trucks, construction, agriculture, generators, boat/ships, or plant maintenance), specialist, service advisor, service dispatcher, terminal dispatcher, parts sales advisor, and sales representative.

## **Program Objectives/Competencies**

Upon completion of the Diesel Technology Associate Degree Program:

- 1. Demonstrate knowledge of class eight truck mechanical components and systems based on Automotive Service Excellence (ASE) standards.
- 2. Demonstrate knowledge of class eight truck electrical and electronic components and systems based on ASE standards.
- 3. Application of class eight truck mechanical systems repair skills based on industry standards.
- 4. Application of class eight truck electrical and electronic systems repair skills based on industry standards.

#### **General Education Competencies**

Upon completion of the Diesel Technology Associate Degree Program and in addition to the above mentioned program objectives/competencies:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- 3. Students will identify, evaluate and analyze evidence to guide decision-making and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Diesel Technology assessment plan is in its second year and is addressed via a plan→do→study→adjust cycle of assessment that begins every fall term and follows one Diesel Technology cohort from first term through graduation.

# **Program Objectives Assessment Plan**

All program objectives are measured with multiple tools.

The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Demonstrate knowledge of class eight truck mechanical components and systems based on Automotive Service Excellence (ASE) standards.	<ul> <li>CAT</li> <li>Pre/Post-Test</li> <li>ASE based Test</li> </ul>	<ul> <li>DMT 155</li> <li>DMT 156</li> <li>DMT 157</li> <li>DMT 165</li> <li>DMT 169</li> <li>DMT 275</li> <li>DMT 276</li> <li>DMT 277</li> <li>DMT 278</li> <li>DMT 280</li> <li>DMT 286</li> <li>DMT 287</li> </ul>
<ol> <li>Demonstrate knowledge of class eight truck electrical and electronic components and systems based on ASE standards.</li> </ol>	<ul><li>CAT</li><li>Pre/Post-Test</li><li>ASE Based Test</li></ul>	<ul><li>DMT 166</li><li>DMT 167</li><li>DMT 168</li><li>DMT 285</li></ul>
Application of class eight truck mechanical systems repair skills based on industry standards.	CAT     Pre/Post-Test     ASE Based Test	<ul> <li>DMT 155</li> <li>DMT 156</li> <li>DMT 157</li> <li>DMT 165</li> <li>DMT 169</li> <li>DMT 275</li> <li>DMT 276</li> <li>DMT 277</li> <li>DMT 278</li> <li>DMT 280</li> <li>DMT 286</li> <li>DMT 287</li> </ul>

4. Application of class eight truck electrical and electronic systems repair skills based on industry standards.	CAT     Pre/Post-Test     ASE Based Test	<ul><li>DMT 166</li><li>DMT 167</li><li>DMT 168</li><li>DMT 285</li></ul>
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# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool: CAT Program Objective(s): 1, 2, 3, 4

**Results:** (2009-2010) Students' biggest concern is the

need for more and newer equipment to train

on.

(2010-2011) Students' biggest concern is with the tools that the college provides for the students to work from. The students felt that the tool boxes were inadequate and that their fellow students did not take proper care of the

tool sets.

**Measurement Tool:** Pre/post Test **Program Objective(s):** 1, 2, 3, 4

Goal Results: 50% improvement

Reporting Period	Course	# Students Attempting	Pre-Test Mean	Post-Test Mean/# of Students Achieving the Goal
2009-2010	DMT 166	6	50%	53%/3
	DMT 167	6	43%	76%/5
	DMT 168	6	12%	50%/2
	DMT 275	4	40%	85%/4
	DMT 276	4	35%	85%/4
	DMT 277	4	25%	77%/4
	DMT 280	4	30%	70%4
	DMT 285	6	41%	75%/5

Reporting Period	Course	# Students Attempting	Pre-Test Mean	Post-Test Mean/# of Students Achieving the Goal
2010-2011	DMT 155	5	48%	74%/4
	DMT 156	5	56%	86%/4
	DMT 165	5	46%	84%/5
	DMT 169	5	56%	92%/5
	DMT 287	4	45%	92%/4
	DMT 286	4	47%	80%/4
	DMT 157	4	42%	75%/4
	DMT 278	4	57%	95%/4

**Measurement Tool: ASE Based Test** 

Program Objective(s): Goal Results: 1, 2, 3, 4

70% pass rate/70% cut score

Reporting Period	Course	Category	#Attempting/ # Achieving	%Achieving/ % Class Mean
2009-2010	DMT 166	Electric/ Electronic Systems (T6)	5/2	40%/66%
	DMT 167	Electric/ Electronic Systems (T6)	5/2	40%/66%
			5/2	40%/66%
	DMT 168	Electric/ Electronic Systems (T6)		
	DMT 275	Brakes (T4)	4/3	75%/68%
		, ,	4/3	75%/68%
	DMT 276	Brakes (T4)	4/4	100%/83%
	DMT 277	Suspension and Steering (T5)		
	DMT 280	Heating, Ventilation, Air Conditioning (T7)	4/3	75%/65%
	DMT 285	Electric/ Electronic Systems (T6)	5/2	40%/66%

Reporting Period	Course	Category	#Attempting/ # Achieving	%Achieving/ % Class Mean
2010-2011	DMT 155	Gasoline Engines (T1)	5/5	100%/91%
	DMT 156	Gasoline Engines (T1)	5/5	100%/91%
	DMT 165	Diesel Engines (T2)	5/2	40%/64%
	DMT 169	Diesel Engines (T2)	5/2	40%/64%
	DMT 287	Drive Train (T3)	4/2	40%/66%
	DMT 286	Drive Train (T3)	4/2	40%/66%
	DMT 278	Preventative Maintenance (T8)	4/4	100%/77%

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which General Education Competences Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul> <li>GEA College Rubrics</li> <li>CAAP</li> <li>Writing Across the Curriculum College Rubric</li> <li>Oral Presentation College Rubric</li> </ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> <li>DMT 166</li> <li>DMT 167</li> <li>DMT 168</li> </ul>

		• DMT 275
		• DMT 276
		• DMT 277
		• DMT 280
		• DMT 155
		• DMT 156
		• DMT 165
		• DMT 169
		• DMT 287
		• DMT 286
		• DMT 157
		• DMT 278
Quantitative and	GEA College Rubrics	Lab Science
Scientific Reasoning	• CAAP	Requirement
4. Demonstrate		
mathematical		
principles.		
5. Demonstrate scientific		
reasoning.		
6. Apply scientific		
methods to the inquiry		
process.  Critical Thinking	• GEA College Pubrice	• ACS 100
7. Read and analyze	<ul><li>GEA College Rubrics</li><li>CAAP</li></ul>	Lab Science
complex ideas.	• CAAP	Requirement
8. Locate, evaluate and		Social Sciences/
apply research		Humanities
information.		Requirement
Evaluate and present		Roquitomont
well-reasoned		
arguments.		

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

GEA College Rubric **Measurement Tool: General Education Objective(s):** 1, 2, 3

100% "excellent (4)", "proficient **Goal Results:** 

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	3	2	67%(mean=2.11)
• 2	3	3	100%(mean=2.07)
• 3	3	3	100%(mean=4.25)*

<sup>1</sup> Present ideas in writing.

**Measurement Tool:** GEA College Rubric **General Education Objective(s):** 4, 5, 6

**General Education Objective(s):** 4, 5, 6 **Goal Results:** 100% "

100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	3	0	0%(mean=1.17)
• 5	3	2	67%(mean=2.58)
• 6	3	1	33%(mean=2.08)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool:GEA College RubricGeneral Education Objective(s):Critical Thinking-Science

Evaluation

Goal Results: 100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	2	67%(mean=2.33)
• 8	3	2	67%(mean=2.00)
• 9	3	2	67%(mean=2.00)

Identify and gather information.

Measurement Tool: General Education Objective(s):

Evaluation

Goal Results:

GEA College Rubric Critical Thinking-English

100% "excellent (4)", "proficient (3)" or "acceptable (2)"

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	3	100%(mean=2.67)
• 8	3	3	100%(mean=2.33)
• 9	3	3	100%(mean=2.67)

<sup>7.</sup> Identify and gather information.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	4(26%)	N/A	4(14.25%)	4(22.75%)	4(33.5%)

Measurement Tool: Writing Across the Curriculum

College Rubric

General Education Objective(s):

Goal Results: 90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1		1	2	1
• 1.1.2		2	1	1
• 1.1.3	1	2		1
• 1.2.1	1	1	2	
• 1.2.2	1	1	2	
• 1.2.3	1	1	1	
• 1.3.1	3			1
• 1.3.2	2		1	1
• 1.4.1	2		2	
• 1.4.2	2	1	1	

Provides a clear, concise thesis statement

Correctly incorporates outside sources

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>1.1.1</sup> Statement is clear and concise

<sup>1.1.2</sup> Statement is well-reasoned

<sup>1.1.3</sup> Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis

<sup>1.2.1</sup> Supporting paragraphs are well reasoned

<sup>1.2.2</sup> Supporting paragraphs clearly relate to the thesis

<sup>1.2.3</sup> Supporting paragraphs are cohesive and logically developed

1.3.1 Provides relevant outside sources

1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling

1.4.1 Writing is error free in all categories (sentence structure,

punctuation, spelling and grammar)

1.4.2 Sentence structure and vocabulary are well-developed and varied

Measurement Tool: Oral Presentation College Rubric General Education Objective(s): 2

Goal Results: 90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend: COMM 102(No COMM 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1		(1)	2(1)	
• 2.1.2		1(1)		1(1)
• 2.1.3		1	(1)	1(1)
• 2.2.1		(1)	1(1)	1
• 2.2.2	(1)	2	(1)	
• 2.2.3	(1)	(1)	2	
• 2.3.1	1	1(1)	(1)	
• 2.3.2	1		1(2)	
• 2.3.3	1			1(2)
• 2.4.1		2(1)		(1)
• 2.4.2	(1)	2		(1)
• 2.4.3	(1)	2		(1)
• 2.5.1	(1)			2(1)
• 2.5.2	(1)			2(1)
• 2.5.3	(1)			2(1)

Provides a well organized speech with appropriate introduction and conclusion

- 2.1.1 Very well organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

# PDSA CYCLE RESULTS (2009-2010)

## **ANALYSIS**

## **Problem Area**

This program needs newer training equipment to train and work on.

## Goal

The goal is to continue to work with the budget available and donations, in order to compete in Ford/AAA and SkillsUSA programs. We will also work to update and add to the training equipment.

### **Action Plan**

The Diesel Instructor will meet with the Dean of Instructional Service to discuss needs and available budget. The Diesel Instructor will also meet with industry partners for donations and will continue to compete in SkillsUSA and Ford/AAA to make more partners for possible donations.

### Results

The Modis Snap-on scanner was updated with the latest software during the summer of 2010. We did not compete in the SkillsUSA program this year due to a lack of support from Student Services. We did not compete in the Ford/AAA program either due to lack of interest from the students. Due to the economy, both in house budget and outside donations were down. We will be able to seek Perkins Grant monies again in a year or two.

# PDSA CYCLE GOALS (2010-2011)

## **ANALYSIS**

## **Problem Area**

This program needs newer training equipment for the students to train and work on. In order to help them prepare for entry into industry, students need to supply their own tool sets and tool storage units.

## Goal

The goal is to continue to work with the budget available and donations, as well as to compete in Ford/AAA and SkillsUSA programs to update and add to the training equipment. Have students supply their own tool sets and tool storage units.

### **Action Plan**

The Diesel Instructor will meet with the Dean of Academic Affairs to discuss needs and available budget. Also, the Diesel Instructor with meet with industry partners for donations and will continue to compete in SkillsUSA and Ford/AAA to make more partners. The Diesel Instructor will meet with the Dean of Academic Affairs to come up with a plan to help the students supply their own tool sets and tool storage units.

## Results

To be presented in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT EARLY CHILDHOOD EDUCATION 2010-2011

What early childhood professionals know and can do significantly influence children's development, learning, and success in school. Since the period of early childhood spans the first eight years of a child's life, these early care and education professionals are being prepared to work in varied settings that include child care centers, family child care homes, Head Start, early intervention programs, public and private schools through third grade, preschools, and family support programs. Professionals may refer to themselves as teachers, educational assistants, assistant teachers, teacher aides, caregivers, or providers. In the final analysis, they all teach and they all provide care.

## **Program Objectives**

Upon completion of the Early Childhood Education Associate Degree Program:

- 1. The student will incorporate understanding of developmental stages, processes, and theories of growth, development, and learning into developmentally appropriate practice.
- The student will demonstrate knowledge of relevant content for young children and developmentally appropriate ways of integrating content into teaching and learning experiences for children from birth through age eight.
- The student will demonstrate effective written and oral communication skills when working with children, families, and early care, education, and family support professionals.

## **General Education Competencies**

Upon completion of the Early Childhood Education Associate Degree Program and in addition to the above mentioned program objectives:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

## Overview

The Early Childhood Education assessment plan is in its second year and is addressed via a plan→do→study→adjust cycle of assessment that begins every fall term and follows one Early Childhood cohort from first term through graduation.

## **Program Objectives Assessment Plan**

All program objectives are measured with multiple tools. The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
1. The student will incorporate understanding of developmental stages, processes, and theories of growth, development, and learning into developmentally appropriate practice.	<ul> <li>CAT</li> <li>Pre/Post-Test</li> <li>Course Projects</li> <li>Written Tests over Course Content</li> </ul>	•ECE 103 •ECE 104 •ECE 106 •ECE 107 •ECE 109 •ECE 111 •ECE 112 •ECE 113 •ECE 114 •ECE 115 •ECE 265
2. The student will demonstrate knowledge of relevant content for young children and developmentally appropriate ways of integrating content into teaching and learning experiences for children from birth through age eight.	<ul> <li>Written Tests over Course Content</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Course Projects</li> </ul>	•ECE 103 •ECE 104 •ECE 106 •ECE 107 •ECE 109 •ECE 111 •ECE 112 •ECE 113 •ECE 114 •ECE 115 •ECE 265

3. The student will	Written Tests Over	•ECE 103
demonstrate effective	Course Content	•ECE 104
written and oral		•ECE 106
communication skills	<ul><li>Oral and Written</li></ul>	•ECE 107
when working with	Projects	•ECE 109
children, families, early		●ECE 111
care, education, and	•GEA	•ECE 112
family support professionals.	CAAD	•ECE 113
professionals.	•CAAP	•ECE 114
		◆ECE 115
		•ECE 265

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool: Course Project

Program Objectives: 1, 2, 3

Goal: 70% Pass Rate

Course Project 2009-2010						
Course	Project	# of Students Attempting	# Passing	% Passing		
ECE 103	Paper	10	10	100%(Mean=91%)		
ECE 104	Paper	15	12	80%(Mean=67.9%)		
ECE 106	Interview	3	3	100%(Mean=93%)		
ECE 107	Assessment	17	15	88%(Mean=77.2%)		
ECE 109	Teaching	13	12	92% (Mean=86%)		
ECE 111	Teaching	13	13	100%(Mean=86%)		
ECE 112	Practicum	13	12	92%(Mean=87%)		
ECE 113	Paper	2	2	100%(Mean=91%)		
ECE 114	Teaching	16	15	94%(Mean=90%)		
ECE 115	Practicum	16	15	94%(Mean=85%)		
ECE 265	Paper	4	4	100%(Mean=90%)		

Course Project 2010-2011						
Course Project # of Students Attempting # Passing % Passing						
ECE 104	Paper	15	13	87% (Mean 73%)		
ECE 106	Interview	12	9	75% (Mean 69%)		
ECE 113	Paper	12	9	75% (Mean 63%)		
ECE 265	Paper	15	13	87% (Mean 78.4%)		

Measurement Tool: Written Tests over Course Content

Program Objectives: 1, 2, 3

Goal: 70% Pass Rate

Written Tests 2009-2010					
Course	# of Students Attempting	# Passing	% Passing		
ECE 103	10	10	100% (Mean=91%)		
ECE 104	15	12	80%(Mean=67.9%)		
ECE 106	3	3	100%(Mean=93%)		
ECE 107	17	15	88%(Mean=77.2%)		
ECE 109	13	12	92% (Mean=86%)		
ECE 111	13	13	100%(Mean=86%)		
ECE 112	13	12	92%(Mean=87%)		
ECE 113	2	2	100%(Mean=91%)		
ECE 114	16	15	94%(Mean=90%)		
ECE 115	16	15	94%(Mean=85%)		
ECE 265	4	4	100%(Mean=90%)		

Written Tests 2010-2011					
Course	# of Students Attempting	# Passing	% Passing		
ECE 104	15	13	87% (Mean 64,2%)		
ECE 106	12	10	75% (Mean 73.0%)		
ECE 113	12	9	75% (Mean 64.6%)		
ECE 265	15	13	875 (Mean 86.6%)		

Measurement Tool: Pre/Post Tests

Program Objectives: 1, 2

Goal: 30% Improvement

2010-2011 Pre-Test/Post Test Results

Course	Pre-Test	Post-Test	Percent		
			Improvement		
ECE 104	40%	61%	21%		
ECE 106	45%	77%	32%		
ECE 113	38%	65%	27%		
ECE 265	51%	67%	16%		

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which General Education Competencies Are Presented and/or Measured
Communication 1. Present ideas in writing 2. Present ideas orally according to standard usage. 3. Demonstrate application of information technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CAT</li> <li>Class Presentations</li> <li>Writing Across Curriculum Rubric</li> <li>Critical Thinking Rubric</li> <li>Oral Presentation Rubric</li> </ul>	<ul> <li>ECE 103</li> <li>ECE 104</li> <li>ECE 106</li> <li>ECE 107</li> <li>ECE 109</li> <li>ECE 111</li> <li>ECE 112</li> <li>ECE 113</li> <li>ECE 114</li> <li>ECE 115</li> <li>ECE 265</li> <li>ENG 102</li> <li>ENG 104</li> <li>COM 102</li> </ul>

<ul> <li>Quantitative and Scientific Reasoning</li> <li>4. Demonstrate mathematical principles.</li> <li>5. Demonstrate scientific reasoning.</li> <li>6. Apply scientific methods to the inquiry process.</li> </ul>	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Laboratory Exercise</li> <li>Laboratory Report</li> </ul>	<ul> <li>MATH 107</li> <li>MATH 110</li> <li>MATH 261</li> <li>Required Science Classes</li> </ul>
Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate, and apply research information.  9. Evaluate and present well-reasoned arguments.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Laboratory Exercise</li> </ul>	<ul> <li>ECE 103</li> <li>ECE 104</li> <li>ECE 106</li> <li>ECE 107</li> <li>ECE 109</li> <li>ECE 111</li> <li>ECE 112</li> <li>ECE 113</li> <li>ECE 114</li> <li>ECE 115</li> <li>ECE 265</li> <li>Required Science Classes</li> </ul>

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

Measurement Tool: GEA College Rubric

**General Education Objectives:** 1, 2, 3

Goal Results: 80% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 1	1	1	100% (mean=3.0)
• 2	1	1	100% (mean=3.0)
• 3	1	1	100% (mean=3.75)

- Present ideas in writing.
- Present ideas orally according to standard usage.
- 3. Demonstrate application of information technology.

Measurement Tool: GEA College Rubric

**General Education Objectives:** 4, 5, 6

Goal Results: 80% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 4	1	0	0% (mean=1.0)
• 5	1	1	100% (mean=4.75)
• 6	1	1	100% (mean=3.5)

- 4. Demonstrate mathematical principles.
- 5. Demonstrate scientific reasoning.
- 6. Apply scientific methods to the inquiry process.

Measurement Tool: GEA College Rubric

**General Education Objectives:** 7, 8, 9

Goal Results: 80% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	1	1	100% (mean=4.5)
• 8	1	1	100% (mean=3.75)
• 9	1	1	100% (mean=3.5)

- 7. Read and analyze complex ideas.
- 8. Locate, evaluate and apply research information.
- 9. Evaluate and present well-reasoned arguments.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objectives:** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	1(48%)	N/A	1(85%)	1(74%)	1(47%)
2009-2010	1(39%)	N/A	1 (53%)	N/A	N/A

**Measurement Tool:** Writing Across the

16(1)

Curriculum College Rubric

**General Education Objective(s):** 

Legend:

90% "Excellent (4)", "Proficient **Goal Results:** 

(3)", or "Adequate (2)" ENG 102(No ENG 102)

2(13)

(1)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
1.1.1	16	16(23)	1/5)	
1.1.2	10	10(23)	1(5)	
1.1.3				
1.2.1				
1.2.2	18(6)	12(15)	3(7)	
1.2.3				
1.3.1	6	21(18)	5/9)	1(2)
1.3.2		21(10)	5(8)	1(2)

15(13)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	6	20 (5)	3 (3)	
• 1.1.2	6	20 (5)	3 (3)	
• 1.1.3	6	20 (5)	3 (3)	
• 1.2.1	7	16 (3)	6 (4)	
• 1.2.2	7	16 (3)	6 (4)	
• 1.2.3	7	16 (3)	6 (4)	
• 1.3.1	5	3 (1)	9 (4)	2 (3)
• 1.3.2	5	3 (1)	9 (4)	2 (3)
• 1.4.1	5	21 (3)	3 (5)	
• 1.4.2	5	21 (3)	3 (5)	

## Provides a clear, concise thesis statement

1.1.1 Statement is clear and concise

1.4.1

1.4.2

- 1.1.2 Statement is well-reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis 1.2.1 Supporting paragraphs are well reasoned

- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well-developed and varied

Measurement Tool: General Education Objective(s): Goal Results: Oral Presentation College Rubric 2 90% "Excellent(4)"/"Proficient(3)"/
"Adequate(2)"
COMM 102(No COMM 102)

## Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1	2	7		
• 2.1.2	2	7		
• 2.1.3	2	7		
• 2.2.1	1	7	1	
• 2.2.2	1	7	1	
• 2.2.3	1	7	1	
• 2.3.1	5	3	1	
• 2.3.2	5	3	1	
• 2.3.3	5	3	1	
• 2.4.1	7	2		
• 2.4.2	7	2		
• 2.4.3	7	2		
• 2.5.1	1		8	
• 2.5.2	1		8	
• 2.5.3	1		8	

Provides a well organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

# PDSA CYCLE RESULTS (2009-2010)

### **ANALYSIS**

## **Problem Area**

Students need to continue to work on writing and communication skills. We work on those areas in class projects, but the GEA and CAAP scores show that more practice or supervision is needed in these areas. I will continue to have all of my classes write and present orally more. This will also enhance the College's Writing Across the Curriculum emphasis.

I want to make sure that my Early Childhood students exit my program with skills that will not only enable them to be employed now, but which will prepare them to continue on with their higher education goals.

### Goal

Every program student will research an early childhood topic, according to the class that they are enrolled in. They will present both an oral and written report using criteria outlined in our GEA Rubric. These reports will receive instructor evaluation based on the rubric and will be given back to each student for personal assessment.

## **Action**

Give each student the assignment. Set up a conference after completion with each student to discuss areas which need improvement.

### Results

I did have the students research an early childhood topic and present a written report. However, due to time constraints, I only asked for the oral presentations in one class. I also didn't have individual conferences with each student due to time restraints.

# PDSA CYCLE GOALS (2010-2011)

### **ANALYSIS**

## **Problem Area**

Students need more work on communication, both in writing and oral presentations. GEA and CAAP scores show that students need more help in these communication areas. After analyzing the results of my classes this year, I have also determined that my students need more direction in studying for tests and getting work turned in on time. This reflects not only on their success in college, but also on their prospective employment skills.

#### Goal

I want to make sure that my Early Childhood Education students exit my program with skills that will not only enable them to be employed now, but will also prepare them to be successful in their pursuit of higher education. I want them to be able to continue with a bachelor's program and also be successful in taking state standardized exams.

I will continue with my goal that every program student will research an early childhood topic and will present both an oral and written report using criteria outlined in our GEA Rubrics. I will also add a Critical Thinking element using the Critical Thinking Rubric as a guide.

In order to make this a learning experience, I will plan to give feedback on these presentations.

### Action

Present the Rubrics to each student. Discuss how they will be evaluated. Give the assignment to each student. Set up a conference after completion with each student to discuss areas that need improvement. I will also give clearer expectations of when assignments are due, and go over consequences of not meeting those deadlines.

### Results

To be presented and analyzed in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT FARRIER SCIENCE 2010-2011

Farrier Science is primarily a self-employed field; therefore, farriers must be knowledgeable and skilled in all facets of the business. The Farrier Science degree program offers hands-on experience in horsemanship, trimming and shoeing, forging and welding. Instruction in anatomy and physiology, business management, and other aspects of horseshoeing are provided in the classroom. The degree program also offers an in-depth study of therapeutic and pathological shoeing, including the physiology, forging and application of shoes.

## **Program Objectives/Competencies**

Upon completion of an Associate Degree in Farrier Science students will:

- 1. Apply knowledge of the anatomy and physiology of the equine limb as it relates to a sound horse according to the American Farriers Association (A.F.A.) standards.
- 2. Perform and defend keg shoe modifications according to A.F.A. standards or veterinary prescription.
- 3. Identify equine gaits and gait faults according to A.F.A. standards or veterinary prescription.
- 4. Identify pathological conditions of the equine limb and successfully apply the appropriate therapeutic shoeing technique according to A.F.A. standards or veterinary prescription.

## **General Education Competencies**

Upon completion of the Associates Degree in Farrier Science and in addition to the above-mentioned program objectives/competencies:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

### Overview

The Farrier Science assessment program is based upon the American Farriers Association certification program and is designed to assess trimming and shoeing skills. In addition to testing these "hands-on" aspects of competency, the program includes written examinations designed to test comprehension of equine anatomy, physiology, and biomechanics.

The Farrier Science assessment plan is in its second year and is addressed via the plan→do→study→adjust cycle that begins every fall term and follows one Farrier Science cohort from first term through graduation.

## **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Apply knowledge of the anatomy and physiology of the equine limb as it relates to a sound horse according to the American Farriers Association (A.F.A.) standards.	<ul> <li>A.F.A. Curriculum Written Tests</li> <li>A.F.A. Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	<ul> <li>ANSC 151</li> <li>FAS 111</li> <li>FAS 121</li> <li>FAS 112</li> <li>FAS 223</li> <li>FAS 224</li> </ul>
Perform and defend keg shoe modifications according to A.F.A. standards or veterinary prescription.	<ul> <li>A.F.A. Curriculum Written Tests</li> <li>A.F.A. Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>LAB Practicals</li> </ul>	<ul> <li>FAS 121</li> <li>FAS 131</li> <li>FAS 122</li> <li>FAS 132</li> <li>FAS 223</li> <li>FAS 233</li> <li>FAS 224</li> </ul>
3. Identify equine gaits and gait faults according to A.F.A. standards or veterinary prescription.	<ul> <li>Lab Practicals</li> <li>A.F.A. Curriculum Written Tests</li> <li>A.F.A. Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	• FAS 111 • FAS 112 • FAS 223 • FAS 224

4. Identify pathological	Lab Practical	• FAS 223
conditions of the equine limb	<ul> <li>A.F.A. Curriculum</li> </ul>	• FAS 233
and successfully apply the	Written Tests	• FAS 253
appropriate therapeutic	<ul> <li>A.F.A. Curriculum</li> </ul>	• FAS 224
shoeing technique according	Performance Tests	• FAS 289
to A.F.A. standards or	• CAT	
veterinary prescription.	<ul> <li>Pre/Post-Test</li> </ul>	
	Oral Tests	

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** A.F.A. Certified Farrier Exam

Program Objective(s): 1

Goal Results: 100% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
20010-2011	2	2	100%
2009-2010	5	3	60%

**Measurement Tool:** A.F.A. Certified Farrier Exam

Program Objective(s): 2

Goal Results: 100% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	2	2	100%
2009-2010	5	4	80%

**Measurement Tool:** A.F.A. Certified Farrier Exam

Program Objective(s): 4

Goal Results: 100% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	2	2	100%
2009-2010	5	5	100%

**Measurement Tool:** A.F.A. Certified Farrier Exam

Program Objective(s): 1-4

Goal Results: 70 % pass rate

Year	# of Students Tested	# of Students Passing on First Attempt	# of Students Retested	# of Students Passing Upon Retest	Total # of Students Passing	Total % of Students Passing
2010- 2011	2	2	N/A		2	100%
2009- 2010	5	4	N/A		4	80%
2008- 2009	5	4	N/A		4	80%

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which General Education Competencies Are Presented and/or Measured
Communication 1. Present ideas in writing. 2. Present ideas orally according to standard usage. 3. Demonstrate application of information technology.	<ul><li>GEA College Rubric</li><li>CAAP</li><li>Writing Rubric</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Science Requirement</li> <li>Social Sciences/ Humanities Requirement</li> <li>FAS 111, 112, 223, 289</li> </ul>
<ul> <li>Quantitative and</li> <li>Scientific Reasoning</li> <li>4. Demonstrate     mathematical     principles.</li> <li>5. Demonstrate scientific     reasoning.</li> <li>6. Apply scientific     methods to the inquiry     process.</li> </ul>	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Critical Thinking Rubric</li> </ul>	<ul><li>Lab Science Requirement</li><li>FAS 121, 122, 253, 224</li></ul>

Critical Thinking	GEA College Rubric	• ACS 100
7. Read and analyze	• CAAP	Lab Science
complex ideas.	Critical Thinking	Requirement
8. Locate, evaluate and	Rubric	Social Sciences/
apply research		Humanities
information.		Requirement
9. Evaluate and present		• FAS 233, 289
well-reasoned		,
arguments.		

## **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College-created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	1(48%)	N/A	1(33%)	1(56%)	1(13%)
2009-2010	1(39%)	N/A	2(33%)	1(25%)	1(21%)

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 1, 2, 3

Goal Results: 100% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	1	1	100%(mean=2.40)
• 2	1	0	0%(mean=1.75)
• 3	1	1	100%(mean=5.00)*
2009-2010			
• 1	4	3	75%(mean=2.18)
• 2	44	4	100%(mean=2.45)
• 3		4	100%(mean=2.87)*

<sup>1</sup> Present ideas in writing.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

**Measurement Tool: General Education Objective(s): Goal Results:** 

**GEA College Rubric** 4, 5, 6 100% "excellent (5)", "proficient (4)", or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	1	0	0%(mean=1.50)
• 5	1	0	0%(mean=2.50)
• 6	1	0	0%(mean=2.25)
2009-2010			
• 4	4	0	0% (mean = 1.5)
• 5	5	2	40%(mean=2.8)
• 6	5	3	60%(mean=3.25)

<sup>4</sup> Demonstrate mathematical principles.

**Measurement Tool: General Education Objective(s):** 

**Goal Results:** 

GEA College Rubric Critical Thinking-Science

Evaluation

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=2.00)
• 8	1	1	100%(mean=2.00)
• 9	1	1	100%(mean=2.00)

<sup>7.</sup> Identify and gather information.

**Measurement Tool: General Education Objective(s):** 

GEA College Rubric Critical Thinking-English Evaluation

100% "excellent (4)", "proficient **Goal Results:** (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=2.00)
• 8	1	1	100%(mean=3.00)
• 9	1	1	100%(mean=2.00)

<sup>7.</sup> Identify and gather information.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

Measurement Tool:GEA College RubricGeneral Education Objective(s):7, 8, 9

Goal Results: 100% "excellent (5)", "proficient (4)", or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	5	3	60%(mean=2.7)
• 8	5	3	60%(mean=2.85)
• 9	5	2	40%(mean=2.75)

7. Read and analyze complex ideas.

8. Locate, evaluate and apply research information.

9. Evaluate and present well-reasoned arguments

Measurement Tool: Writing Across the Curriculum

College Rubric

General Education Objective(s): 1

Goal Results: 90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011	(-/	(0)	\_/	(-/
• 1.1.1	4(1)	3(4)	(2)	
• 1.1.2	2(2)	4(2)	1(3)	
• 1.1.3	1(1)	5(3)	1(3)	
• 1.2.1	2	4(4)	1(3)	
• 1.2.2	4	3(4)	(3)	
• 1.2.3	3	4(5)	2	
• 1.3.1	NA			
• 1.3.2	NA			
• 1.4.1	1	4(3)	2(4)	
• 1.4.2	2	(3)	1(4)	

Provides a clear, concise thesis statement

Provides supporting paragraphs which relate to the thesis

Correctly incorporates outside sources

Uses appropriate grammar, syntax, punctuation, and spelling

<sup>1.1.1</sup> Statement is clear and concise

<sup>1.1.2</sup> Statement is well-reasoned

<sup>1.1.3</sup> Statement leads to plentiful additional discussion

<sup>1.2.1</sup> Supporting paragraphs are well reasoned

<sup>1.2.2</sup> Supporting paragraphs clearly relate to the thesis

<sup>1.2.3</sup> Supporting paragraphs are cohesive and logically developed

<sup>1.3.1</sup> Provides relevant outside sources

<sup>1.3.2</sup> Cites outside sources correctly

<sup>1.4.1</sup> Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)

<sup>1.4.2</sup> Sentence structure and vocabulary are well-developed and varied

**Measurement Tool:** Oral Presentation College Rubric **General Education Objective(s):** 90% "Excellent(4)"/"Proficient(3)"/ **Goal Results:** "Adequate(2)" COMM 102(No COMM 102) Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1	1	5(5)	2(1)	
• 2.1.2		5(4)	3(2)	
• 2.1.3	3	2(4)	3(2)	
• 2.2.1		6(3)	2(3)	
• 2.2.2	1	6(3)	1(3)	
• 2.2.3	2	5(4)	(3)	
• 2.3.1	2	6(2)	(4)	
• 2.3.2	4	4(4)	(2)	
• 2.3.3	NA			
• 2.4.1	1(1)	7(5)		
• 2.4.2	2(1)	6(5)		
• 2.4.3	6(2)	2(3)	(1)	
• 2.5.1	NA			
• 2.5.2	NA			
• 2.5.3	2(1)	6(4)	(1)	

Provides a well organized speech with appropriate introduction and conclusion

- 2.1.1 Very well organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilizes note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

- Provides appropriate handouts and/or visual aids
  2.5.1 Provide entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

Measurement Tool: Critical Thinking College Rubric

General Education Objective(s): 6
Goal Results: 90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Laboratory Science(No Lab Sci)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 6.1.1	1	4(4)	1(4)	
• 6.1.2	1	4(6)	1(2)	
• 6.1.3	1	4(6)	1(2)	
• 6.2.1	2	2(7)	2(1)	
• 6.2.2	2(3)	2(5)	2	
• 6.2.3	2(1)	3(7)	1	
• 6.3.1		4(4)	2(4)	
• 6.3.2	1	5(4)	1(4)	
• 6.3.3	1(2)	4(5)	1(1)	

Identify and gather

- 6.1.1 Asks insightful questions
- 6.1.2 Critiques content
- 6.1.3 Examines inconsistencies

#### Analyze and evaluate

- 6.2.1 Analyzes and evaluates thoroughly
- 6.2.2 Uses reasonable judgment
- 6.2.3 Critically discriminates between good and bad information

## Synthesize and formulate conclusion

- 6.3.1 Discusses issues thoroughly and argues succinctly
- 6.3.2 Assimilates information
- 6.3.3 Justifies conclusion

# PDSA CYCLE RESULTS (2009-2010)

## **ANALYSIS**

## **Problem Area**

Students taking the A.F.A. exam were lacking in their knowledge of the anatomy of the equine digit.

### Goal

Stress functions of five sensitive structures of the equine digit. Allow more distributed practice on square toes and clips.

## **Action**

Insure that students are knowledgeable in this area by giving a pretest assessment before the A.F.A. exam

#### Results

The two students taking the A.F.A. exam took the test in Oklahoma. In years past the test was given here and I was able to look at my students' test results and make evaluations based upon that. Once the test has been given, the A.F.A. will not release any test information. That being the case, I do not have any quantitative data to determine outcomes. This situation will be addressed in my action plan for next year.

# PDSA CYCLE GOALS (2010-2011)

## **ANALYSIS**

### **Problem Area**

The A.F.A. Certified Farrier exam has been the most widely accepted Industry Standard for the last 25 years. In the last five years there has been a noticeable shift towards other standards. The reason for this is that the A.F.A. has undergone lots of inner turmoil and has lost most of its membership as farriers in general have moved towards alternatives to the A.F.A. Just in the last year they changed their grading procedure which that meant if a student failed one portion of the test he or she automatically fail all sections. That means I do not get any feedback on the other areas because they are not even graded. I have come to the conclusion that the A.F.A. exams no longer serve the purpose of helping me evaluate student competency. Therefore, I need to explore other alternatives. Another problem with the A.F.A. and is the main reason industry professionals are moving away from that organization is that they have failed to make changes as the horseshoeing industry has changed.

#### Goal

My goal for next year is to change to an alternative industry standard. I am working with Chris Gregory of Heartland shoeing school to adopt a new industry standard. If that does not prove to be functional I will look into the Brotherhood of Working Farriers certification exams.

## **Action**

Implement new Industry Testing Standard.

### Results

To be presented and analyzed in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT FINE ARTS 2010-2011

Contemporary artists need strong practical technical proficiency so they can convey conceptual ideas through visual material reality. The Fine Arts program emphasizes the important aesthetic correlation of appropriate media manipulation with manifestation of a desired affective outcome. The program offers hands-on creative experience with a variety of media applications to visual problem-solving including: bronze casting, fabrication with a variety of materials, carving, drawing and painting. There is an equal emphasis upon student development of appropriate technical manipulation, individual creative initiative and conceptual awareness and intent.

Bronze sculpture has a strong tradition in Mesalands' foundry; however, other media options are strongly pursued. Exploration in combining several media is encouraged.

## **Program Objectives/Competencies**

Upon successful completion of the Fine Arts Degree Program:

- 1. The student will demonstrate the ability to produce fine art by demonstration of technical skills in 2D and/or 3D medium.
- 2. The student will demonstrate the ability to defend projects using fine art criteria.
- 3. The student will demonstrate the ability to produce an idiosyncratic body of work for self promotion.

## **General Education Competencies**

Upon completion of the Fine Arts Degree Program and in addition to the above mentioned program objectives/competencies:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

 Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

## Overview

The Fine Arts assessment plan is in its second year and is addressed via the Plan > Do > Study > Adjust Cycle that begins every other fall term and follows one Fine Arts cohort from first term through graduation.

## **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
The student will demonstrate the ability to produce fine art by demonstration of technical skills in 2D and/or 3D medium.	<ul> <li>Capstone Projects</li> <li>Capstone Art Show</li> <li>CAT</li> <li>Pre/Post-Test</li> </ul>	• ART 105 • ART 112 • ART 113 • ART 114 • ART 202 • ART 203 • ART 204 • ART 205 • ART 215 • ART 222 • ART 222 • ART 230 • ART 293
The student will demonstrate the ability to defend projects using fine art criteria.	<ul> <li>Capstone Projects</li> <li>Capstone Art Show</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Defense</li> <li>Critiques</li> </ul>	• ART 101 • ART 103 • ART 104 • ART 105 • ART 112 • ART 113 • ART 114 • ART 202 • ART 203 • ART 204 • ART 205 • ART 215

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** Senior Capstone Show – Rubric\*

Program Objective(s): 1, 2, 3

Goal Results: 100% pass rate; cut score is 80%

Criteria	Excellent 5	Proficient 4	Acceptable 3	Inadequate 2	Unacceptable 1
Demonstrate idiosyncratic and technical skills with chosen media.	Student can independently complete high quality projects.	Student successfully meets expectations independently most of the time. Shows some independent initiative.	Student makes satisfactory progress towards established criteria for completed project needs personal guidance.	Student makes insufficient progress toward completing establishes criteria for project.	Student does not attempt or demonstrate minimal skills to complete project.

Year	n	Media Used	Defense	Creativity	Craftsmanship	Deadlines
2010-2011	0					
2009-2010	2	2D and 3D	4	4.5	4.5	4

<sup>\*</sup>Each graduate must execute senior capstone show before graduation. The show will include past capstone projects for previous classes as well as work completed in last semester. Student will present defense of the work.

## **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Writing Across the Curriculum</li> </ul>	<ul> <li>ACS 100</li> <li>CIS 101</li> <li>COM 102</li> <li>ENG 102</li> <li>Lab Science Requirement</li> <li>Social/Behavioral Science</li> <li>Humanities/Fines Arts Requirement</li> <li>ART 101</li> </ul>
Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	GEA College Rubric     CAAP	Lab Science     Requirement     MATH 110
Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well-reasoned arguments.	<ul><li>GEA College Rubric</li><li>CAAP</li><li>Capstone Project</li></ul>	<ul> <li>ACS 100</li> <li>Lab Science Requirement</li> <li>Social Sciences/Humanities Requirement</li> <li>ART 100</li> <li>ART 103</li> <li>ART 104</li> </ul>

## **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the academic course of study.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 1, 2, 3

Goal Results: 100% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing	
2009-2010				
• 1	1	0	0%(mean=1.75)	
• 2	1	0	0%(mean=2.4)	
• 3	1	0	0%(mean=1.64)	

<sup>1</sup> Present ideas in writing.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 4, 5, 6

Goal Results: 100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 4	1	0	0% (mean=2.0)
• 5	1	1	100%(mean=4.5)
• 6	1	0	0%(mean=2.0)

<sup>4</sup> Demonstrate mathematical principles.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 7, 8, 9

Goal Results: 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	1	1	100%(mean=4.5)
• 8	1	0	0%(mean=2.0)
• 9	1	1	100%(mean=3.0)

7. Read and analyze complex ideas.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2009-2010	N/A	1(66%)	N/A	N/A	N/A
2010-2011					

Measurement Tool: Writing Across the Curriculum

College Rubric

General Education Objective(s):

Goal Results: 90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1	3(3)	2	(7)	
• 1.1.2	3(3)	2	(7)	
• 1.1.3	3(3)	2	(7)	
• 1.2.1	3(3)	2(6)		(1)
• 1.2.2	3(3)	2(6)		(1)
• 1.2.3	3(3)	2(6)		(1)
• 1.3.1	2(3)	1	1(2)	1(5)
• 1.3.2	2(3)	1	1(2)	1(5)
• 1.4.1	2(3)	2(7)		1(1)
• 1.4.2	2(3)	2(7)		1(1)

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	1(1)	6	2(2)	1
• 1.1.2	1(1)	6	2(2)	1
• 1.1.3	1(1)	7	2(2)	0
• 1.2.1	1(1)	6(0)	2(2)	1
• 1.2.2	1(1)	7(0)	1(2)	1
• 1.2.3	1(1)	7(0)	2(2)	0
• 1.3.1	0(0)	6	3(1)	1(2)
• 1.3.2	0(0)	7	2(1)	1(2)
• 1.4.1	0(0)	7(2)	3(1)	0(0)
• 1.4.2				
	1(0)	7(2)	2(1)	0(0)

Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well-reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
- 1.4.2 Sentence structure and vocabulary are well-developed and varied.

# PDSA CYCLE RESULTS (2009-2010)

### **ANALYSIS**

### **Problem Area**

Students are uncomfortable doing critiques in front of an audience. Attendance is the main problem in getting students to complete work.

### Goal

Make students more comfortable doing critiques with continued emphasis on critiques and personal performance. Encourage students to attend classes so they can achieve deadlines for finishing work.

#### **Action Plan**

Increase the number of class critiques students are required to participate in. Make attendance 10% of final grade.

# **Results**

Four critiques were held. One of the four critiques had a written component which could be used to promote students' art work. Students did not like writing about their art. Attendance was not made 10% of the final grade as attending class should be expected. If attendance was poor, up to one letter grade (10%) was deducted from final grade instead. When students had poor attendance, overall grades and/or performance did not seem to matter.

# PDSA CYCLE GOALS (2010-2011)

### **ANALYSIS**

#### **Problem Area**

Students have trouble completing deadlines for assignments.

#### Goal

Encourage students to achieve deadlines for finishing work.

#### **Action Plan**

Break assignments into smaller pieces so students feel like they are accomplishing more and do not become overwhelmed.

# Results

To be presented and analyzed in the 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT NATURAL SCIENCES 2010-2011

The Natural Science program at Mesalands Community College provides educational options in either paleontology or geology.

The option in paleontology provides a primary education in the earth and biological sciences with an emphasis on paleontology. Students will be exposed to the fundamentals of geology, biology, and paleontology. The paleontology option emphasizes practical knowledge of fossils through field trips and laboratory work. Courses take advantage of the rich natural resources of the mesalands country of eastern New Mexico, a high technology science laboratory, and the College's paleontology museum, Mesalands Dinosaur Museum. The Paleontology option emphasizes fossils, in particular, their collection and study.

The option in geology provides a primary education in the natural sciences. Students will be exposed to the fundamentals of geology, biology, and computer science. The geology program emphasizes practical knowledge through field trips and laboratory work. Courses take advantage of the rich natural resources of the mesa country of eastern New Mexico, a state-of-the-art, computer-interactive science laboratory, and the College's natural history museum, Mesalands Dinosaur Museum.

# **Program Objectives/Competencies:**

Upon completion of the Natural Sciences Associate Degree Program:

- 1) The student will demonstrate an in-depth understanding of the concepts and associated geological processes of the Theory of Plate Tectonics.
- 2) The student will identify common minerals and rocks, and explain their genesis and the environments in which they form.
- 3) The student will demonstrate an understanding of geological time and the principles of stratigraphy.
- 4) The student will correctly apply appropriate field and laboratory techniques to successfully complete assigned projects.
- 5) The student will demonstrate the skills to conduct and present a scientific research project under guidance of the instructor.

In addition, upon completion of the Natural Sciences Associate Degree Program with option Paleontology

- 6) The student will demonstrate an understanding of anatomical structures and their function in the principal groups of invertebrates and vertebrates.
- 7) The student will demonstrate a broad-based understanding of the components of the Theory of Evolution.
- 8) The student will demonstrate an understanding of the principles of museum displays and collections, and of conservation and curation of natural history specimens.

In addition, upon completion of the Natural Sciences Associate Degree Program with option Geology

- 9) The student will demonstrate an understanding of the genesis, occurrence, and exploitation of geological resources (mineral, energy, water).
- 10) The student will demonstrate an understanding of the nature of geological hazards, and demonstrate the ability to evaluate such hazards.

# **General Education Competencies:**

Upon completion of the Natural Sciences Associate Degree Program and in addition to the above-mentioned program objectives/competencies:

- 4. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- 5. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- 6. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Natural Sciences assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Natural Sciences cohort from first term through graduation.

# **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

PROGRAM OBJECTIVE	MEASUREMENT TOOLS	COURSES IN WHICH PROGRAM OBJECTIVES ARE PRESENTED AND/OR MEASURED.
1) The student will demonstrate an in-depth understanding of the concepts and associated geological processes of the Theory of Plate Tectonics.	<ul><li>Laboratory Exercise</li><li>Pre/Post-Test</li><li>Faculty-prepared Examination</li></ul>	<ul><li>GEOL 151</li><li>GEOL 152</li></ul>
2) The student will identify common minerals and rocks, and explain their genesis and the environments in which they form.	<ul><li>Laboratory Exercise</li><li>Pre/Post-Test</li><li>Faculty-prepared Examination</li></ul>	<ul><li>GEOL 151</li><li>GEOL 152</li><li>GEOL 190</li><li>GEOL 290</li><li>GEOL 293</li></ul>
3) The student will demonstrate an understanding of geological time and the principles of stratigraphy	<ul><li>Laboratory Exercise</li><li>Pre/Post-Test</li><li>Faculty-prepared Examination</li></ul>	<ul><li>GEOL 151</li><li>GEOL 152</li><li>GEOL 210</li></ul>
4) The student will correctly apply appropriate field and laboratory techniques to successfully complete assigned projects.	<ul> <li>Laboratory Exercise</li> <li>Field Exercise</li> <li>Program-specific Rubrics</li> <li>Capstone Project</li> </ul>	<ul> <li>GEOL 118</li> <li>GEOL 120</li> <li>GEOL 122</li> <li>GEOL 190</li> <li>GEOL 290</li> <li>GEOL 293</li> </ul>
5) The student will demonstrate the skills to conduct and present a scientific research project under guidance of the instructor.	<ul><li>Capstone Project</li><li>Scientific Report</li><li>Oral Presentations</li></ul>	<ul><li>GEOL 190</li><li>GEOL 290</li><li>GEOL 289</li></ul>
6) The paleontology student will demonstrate an understanding of anatomical structures and their function in the	<ul> <li>Laboratory Exercise</li> <li>Pre/Post-Test</li> <li>Faculty-prepared Examination</li> <li>Class Presentations</li> </ul>	<ul><li>GEOL 152</li><li>GEOL 120</li><li>GEOL 210</li><li>GEOL 289</li><li>GEOL 293</li></ul>

	T	
principal groups of invertebrates and		<ul><li>GEOL 293K</li><li>BIOL 113</li></ul>
vertebrates.		• BIOL 250
7) The paleontology student will demonstrate a broad-based understanding of the components of the Theory of Evolution.	<ul> <li>Class Presentations</li> <li>Laboratory Exercise</li> <li>Pre/Post-Test</li> <li>Faculty-prepared Examination</li> </ul>	<ul> <li>BIOL 113</li> <li>GEOL 141</li> <li>GEOL 152</li> <li>GEOL 210</li> </ul>
8) The paleontology student will demonstrate knowledge of the principles of museum displays and collections, and of conservation and curation of natural history specimens.	<ul> <li>Faculty-prepared Examination</li> <li>Pre/Post-Test</li> <li>Class Assignment</li> <li>Museum and Laboratory Projects</li> </ul>	<ul> <li>GEOL 105</li> <li>GEOL 120</li> <li>GEOL 190</li> <li>GEOL 290</li> <li>GEOL 289</li> </ul>
9) The geology student will demonstrate an understanding of the genesis, occurrence, and exploitation of geological resources (mineral, energy, water).	<ul><li>Faculty-prepared Examination</li><li>Pre/Post-Test</li></ul>	<ul><li>GEOL 141</li><li>GEOL 151</li><li>GEOL 230</li></ul>
10) The geology student will demonstrate an understanding of the nature of geological hazards, and demonstrate the ability to evaluate such hazards.	<ul> <li>Faculty-prepared Examination</li> <li>Pre/Post-Test</li> <li>Laboratory Exercise</li> <li>Case Study</li> </ul>	<ul><li>GEOL 141</li><li>GEOL 151</li><li>GEOL 230</li></ul>

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool: Laboratory Exercise "Seafloor Spreading",

**GEOL 152** 

Program Objective(s): 1

Goal Results: 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2009-2010	4	3	75% (mean=83%)
2010-2011	1	1	100% (85%)

**Measurement Tool:** Laboratory Exercise "Relative Dating",

**GEOL 152** 

Program Objective(s): 3

**Goal Results:** 80% pass rate; cut score is 75%

Reporting Period	# of students attempting	# passing	% passing
2009-2010	4	4	100%
			(mean=83.5%)
2010-2011	1	1	100%
			(mean=95%)

Measurement Tool: Chapter Test "Plate Tectonics",

**GEOL 151** 

Program Objective(s): 1

Goal Results: 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100%
			(mean=87%)

Measurement Tool: Laboratory Exercise "Plate Boundaries of an

Unknown Ocean and Continent",

**GEOL 151** 

Program Objective(s): 1

**Goal Results:** 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=97%)

Measurement Tool: Laboratory Exercise "Plate Tectonics and the

Origin of Magma",

**GEOL 151** 

Program Objective(s): 1

**Goal Results:** 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	0	0% (mean=59%)

Remark: The overall failure of the student is due to the last-minute-submission of an incomplete exercise. The completed parts of the exercise scored 77%.

Measurement Tool: 4 Laboratory Exercises (identification and

genesis of minerals, igneous, sedimentary and

metamorphic rocks)

**GEOL 151** 

Program Objective(s): 2

**Goal Results:** 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=97%)

**Measurement Tool:** Final Exam Section (relative dating,

unconformities)

**GEOL 151** 

Program Objective(s): 3

**Goal Results:** 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=100%)

Measurement Tool: Laboratory Exercise "Geological Time"

**GEOL 151** 

Program Objective(s): 3

**Goal Results:** 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=98%)

Measurement Tool: Practical Assignment: Construction of a

Storage Plaster Jacket

**GEOL 105** 

Program Objective(s): 4, 8

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

Measurement Tool: Practical Assignment: Stabilization and

Preparation of Eocene Fish Slab

**GEOL 105** 

Program Objective(s): 4, 8

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	2	67%

Remarks: The failing student did not pass because he tried an inappropriate tool for this kind of preparation. Subsequently, he was given a second assignment which he passed.

**Measurement Tool:** Field exercise: Construction of a Field Plaster

Jacket

**GEOL 120** 

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	2	66%

**Measurement Tool:** Field Assignment: Retrieval of Fossil in

Sandstone Using Mechanical Tools

**GEOL 120** 

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

set in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

Measurement Tool: Lab Exercise: Preparation of Fossil with Airtool

**GEOL 120** 

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

**Measurement Tool:** Lab Exercise: Reassembling of Fragmentary

Recovered Fossil

**GEOL 120** 

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

Measurement Tool: Lab Exercise: Anatomy of Corals

**GEOL 210** 

Program Objective(s): 6

**Goal Results:** 80% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	2	66% (mean=76%)

Measurement Tool: Oral Recapitulation (Evolutionary History and

Functional Interpretation of Anatomical Characters in Archosaurs [phytosaurs,

aetosaurs, basal dinosaurs])

**GEOL 120** 

Program Objective(s): 6

**Goal Results:** 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

**Measurement Tool:** Final Exam Section (Principles of Evolution)

**GEOL 210** 

Program Objective(s): 7

Goal Results: 100% pass rate; cut score is 80%

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100% (mean=88%)

Measurement Tool: Practical/Written Assignment: Condition Report

"Identification of Eocene fossil material for

display" GEOL 105

Program Objective(s): 8

**Goal Results:** 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

Measurement Tool: Practical/Written Assignment: Curation of

natural history specimens (process of

inventorizing)

GEOL 105 (Fall 2010) GEOL 270 (Spring 2011)

Program Objective(s): 8

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011 (Fall)	3	3	100%
2010-2011 (Spring)	1	1	100%

Measurement Tool: Field/Lab Assignment: Data Recording and

Storage during Fossil Recovery

**GEOL 120** 

Program Objective(s): 4

**Goal Results:** 100% pass rate; cut rate is 90% according to

criteria defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100% (mean=97%)

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

GENERAL EDUCATION COMPETENCIES	MEASUREMENT TOOLS	COURSES IN WHICH PROGRAM OBJECTIVES ARE PRESENTED &/OR MEASURED.
Communication:	<ul> <li>GEA College Rubric</li> </ul>	• ACS 100
1. Present ideas in	• CAAP	• GEOL 105
writing.	• CAT	• GEOL 151
2. Present ideas orally	<ul> <li>Class Presentation</li> </ul>	• GEOL 152
according to standard		• GEOL 210
usage.		• GEOL 230
3. Demonstrate		• GEOL 190
application of information		• GEOL 290
technology.		• GEOL 293

Quantitative and Scientific Reasoning: 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Laboratory Exercise</li> <li>Laboratory Report</li> </ul>	<ul> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>Lab Science Requirement</li> <li>Soc. Sci./Humanities Requirement</li> <li>GEOL 151</li> <li>GEOL 152</li> <li>GEOL 190</li> <li>GEOL 210</li> <li>GEOL 230</li> <li>GEOL 289</li> <li>GEOL 290</li> <li>BIOL 113</li> <li>BIOL 250</li> <li>Lab Science</li> </ul>
Critical Thinking: 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Capstone Project</li> <li>Laboratory Exercise</li> </ul>	Requirement  ACS 100 GEOL 151 GEOL 152 GEOL 190 GEOL 210 GEOL 230 GEOL 289 GEOL 290 BIOL 113 BIOL 250 Lab Science Requirement Soc. Sci./Humanities Requirement

# **General Education Competencies Results:**

This section presents the general education competencies results. The Mesalands Community College-created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 1, 2, 3

Goal Results: 80% "excellent (4)" or "proficient

(3)"

Reporting Period	# of students attempting	# passing	% passing
2010-2011			
• 1	1	1	100%(mean=2.50)
• 2	1	1	100%(mean=3.20)
• 3	1	1	100%(mean=4.00)*
2009-2010			1000//maan 20)
• 1	1	1	100%(mean=3.0)
• 2	1	1	100%(mean=3.6) 100%(mean=4.25)*
• 3	1	1	100 /o(iiiedii=4.23)

<sup>1</sup> Present ideas in writing.

- 2 Present ideas orally according to standard usage.
- 3 Demonstrate application of information technology.

**Measurement Tool:** Oral Presentation College Rubric

**General Education Objective(s):** 

**Goal Results:** 90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

COMM 102(No COMM 102) Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1		2 (1)		
• 2.1.2	2		(1)	
• 2.1.3	1	1 (1)		
• 2.2.1	2	(1)		
• 2.2.2		1 (1)	1	
• 2.2.3	1 (1)	1		
• 2.3.1		2 (1)		
• 2.3.2	1	(1)	1	
• 2.3.3	N/A	N/A	N/A	N/A
• 2.4.1	1 (1)		1	
• 2.4.2	1 (1)	1		
• 2.4.3	2 (1)			
• 2.5.1	N/A	N/A	N/A	N/A
• 2.5.2	2 (1)			
• 2.5.3	N/A	N/A	N/A	N/A

Provides a well organized speech with appropriate introduction and conclusion 2.1.1 Very well-organized

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

2.2.1 All main points are well-documented and supported by numerous, compelling facts

2.2.1 Clearly and concisely presented

2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

<sup>2.1.2</sup> Attention grabbing introduction

<sup>2.1.3</sup> Convincing conclusion

2.3.1 Excellent gestures and eye contact

2.3.2 Conversational presentation

2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

2.4.1 Excellent mechanics throughout

2.4.2 Very appropriate presentation relative to audience

2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information

2.5.3 Grammatically correct material

Measurement Tool: GEA College Rubric

General Education Objective(s): 4, 5, 6

Goal Results: 90% "excellent (5)" or "proficient

(4)"

Reporting Period	# of students attempting	# passing	% passing
2010-2011			
• 4	1	0	0%(mean=2.00)
• 5			
• 6			
2009-2010			
• 4	1	0	0% (mean = 2.5)
• 5	1	1	100%(mean=4.5)
• 6	1	1	100%(mean=5.0)

- 4 Demonstrate mathematical principles.
- 5 Demonstrate scientific reasoning.
- 6 Apply scientific methods to the inquiry process.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 7, 8, 9

Goal Results: 80% "excellent (5)" or "proficient (4)"

Reporting Period	# of students attempting	# passing	% passing
2009-2010			
• 7	1	1	100%(mean=4.75)
• 8	1	0	0%(mean=3.0)
• 9	1	0	0%(mean=2.5)

- 7. Read and analyze complex ideas.
- 8. Locate, evaluate and apply research information.
- 9. Evaluate and present well-reasoned arguments

Measurement Tool:GEA College RubricGeneral Education Objective(s):Critical Thinking-English

Evaluation

Goal Results: 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.00)
• 8	1	1	100%(mean=3.00)
• 9	1	1	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

General Education Objective(s): 1, 4-9
Goal Results: 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-11	2(80%)	2(85%)	2(72%)	2(84.5%)	2(78%)
2009-10	1(80%)	1(30%)	1(94%)	1(83%)	1(79%)

# PDSA CYCLE RESULTS 2009-2010

# **ANALYSIS**

### **Problem Areas**

- 1. Research Methods
- 2. Scientific Writing

Students have few opportunities to learn how to undertake the step-by-step procedure in scientific research, and how to produce a scientific paper, other than during a capstone project in their last term. Research and scientific writing skills are acquired by continuing practice. Due to time constraints, individual supervision by the faculty proved difficult to achieve.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

#### Goal

Each program student will, at the end of the fall semester 2010, produce one scientific paper which presents his original research, written and formatted according to the standards of an established scientific journal.

#### **Action Plan**

Initially, the program faculty determined a 2 hour period per week during which he and all program students meet in the lab. This time will be dedicated to research and writing under guidance of the faculty.

Practically, due to severe time constraints of the program instructor, the implementation of the action plan was postponed into spring semester 2011. However, only one program student actually participated in the framework of an independent research project (GEOL 289), while the other two program students could not because of time restrictions due to non-academic jobs, in addition to other personal commitments.

# Results (Spring 2011)

- 1. An action plan on voluntary basis does not seem practicable. In the future, I will consider to implementing the action plan in the form of a class (GEOL 289) which will perhaps even be mandatory for obtaining the degree.
- 2. The time frame of 2 hours per week is not enough to achieve the goals set within one semester. Either the time allocated must be extended, or the scope of the research project or the amount of writing must be strictly cut down and adapted to the time available. In the student project, even double the amount of time originally intended was not enough to bring the project to a successful termination.
- 3. The student, although having years of practical experience and skills and a well-above average knowledge in the field, needed much more guidance then anticipated. Without explicit cooperative work, rather than only giving instructions (research method) and intensive revisions of the writing (frequently up to two or three consecutive rewriting and corrections of the same paragraph or whole part), the student feels easily lost and becomes demotivated. Essentially, the instructor must be present and active at all times.
- 4. It is essential to explain the structure of a scientific paper in detail, as well as to provide examples.
- 5. The student was able to develop the overall structure and single steps of the project satisfactorily on his own account. However, the practical execution of each step needed intensive guidance. Once accomplished, the student was well able to apply (reproduce) the same step to a related question without the supervision of the instructor.
- 6. Writing proved the most time-consuming part for both student and instructor. Significant improvement took place only after (1) one week of explicit and

detailed recapitulation of the anatomical terms and discipline-specific jargon, (2) discussion of examples from the literature, and (3) extensive practicing and revisions.

# PDSA CYCLE GOALS 2010-2011

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Not reported.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT PRE-NURSING 2010-2011

The pre-nursing certificate enables students to fulfill the transfer requirements to enter two or four-year nursing programs at other institutions. Students take non-nursing academic courses in science, mathematics, and the humanities for possible matriculation into a professional nursing program. The courses taken will allow the student to build a foundation for nursing courses that will be completed after transfer to a professional nursing program.

# **General Education Competencies**

Upon completion of the Pre Nursing Certificate:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decisionmaking and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The pre-nursing assessment plan is in its first year and is addressed via a plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust cycle that begins every fall term and follows one prenursing cohort from first term through graduation.

### **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Compe	Education etencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Commi	unication	College Rubrics	• ACS 100
1. Present	ideas in	• CAAP	• AHS 103
writing.		• ENG 299	• AHS 110
2. Present	ideas orally		• BIOL 211
accordir	ng to		• BIOL 212
	d usage.		• BIOL 222
3. Demons			• COM 101
applicat			• COM 102
informat	_		• CIS 101
technolo	ogy.		• ENG 102
			Lab Science Requirement
			Social Sciences/
			Humanities Requirement
Quantit	ative and	College Rubrics	• BIOL 211
Scientific	Reasoning	• CAAP	• BIOL 212
4. Demons	strate	• ENG 299	• BIOL 222
mathem	atical		Lab Science Requirement
principle	es.		• MATH 101
5. Demons	strate		• PSY 101
	c reasoning.		• PSY 104
6. Apply so			
methods			
inquiry p			_
	Thinking	College Rubrics	• BIOL 211
7. Read ar	•	• CAAP	• BIOL 212
complex		• ENG 299	• BIOL 222
8. Locate,			Lab Science Requirement
and app	ly research		• PSY 101
9. Evaluate			• PSY104
9. Evaluati present			Social Sciences/
reasone			Humanities Requirement
argume	_		

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

Measurement Tool: GEA College Rubric

General Education Objective(s): 1, 2, 3

Goal Results: 80% "excellent (4)" or "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	1	1	100%(mean=2.75)
• 2	1	1	100%(mean=2.4)
• 3	1	1	100%(mean=5.0)*

<sup>1</sup> Present ideas in writing.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 4, 5, 6

Goal Results: 90% "excellent (5)" or "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	1	1	100% (mean = 3.0)
• 5	1	1	100%(mean=3.5)
• 6	1	1	100%(mean=3.5)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool:GEA College RubricGeneral Education Objective(s):Critical Thinking-Science

Evaluation

Goal Results: 100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.0)
• 8	1	1	100%(mean=3.0)
• 9	1	1	100%(mean=3.0)

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

7. Identify and gather information.

8. Analyze and evaluate information.

9. Synthesize and formulate conclusions.

Measurement Tool:GEA College RubricGeneral Education Objective(s):Critical Thinking-English

Evaluation

Goal Results: 100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.00)
• 8	1	1	100%(mean=2.00)
• 9	1	1	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	1(6%)	1(31%)	1(39%)	1(19%)	1(21%)

# PDSA CYCLE GOALS (2010-2011)

# **ANALYSIS**

### **Problem Area**

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

#### Goal

Collect data based on General Education Competency Reporting Schedule.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

# **Action Plan**

- 1. Lead faculty member will identify students enrolled in Pre-Nursing Program.
- 2. Lead faculty member will identify courses that those students are enrolled in.
- 3. Lead faculty will contact instructors of those courses in order to collect data based on *General Education Competency Reporting Schedule*.

# Results

To be presented and analyzed in 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT SOCIAL WORK 2010-2011

The Social Work Program provides the student with an introduction to the field of social work and the social welfare system, the human behavior content required of human services workers and social welfare policy analysis skills. The curriculum may serve as a preparatory foundation for those interested in continuing their study at the Bachelor of Social Work level.

# **Program Objectives/Competencies**

Upon completion of the Social Work Associate Degree Program:

- 1. Students will summarize the history of social welfare, past and present.
- Students will recognize the National Association of Social Workers Code of Ethics and Preamble and discuss steps involved in becoming a member of the national organization.
- 3. Students will demonstrate written and oral communication skills necessary in the field for effective social work practice.

# **General Education Competencies**

Upon completion of the Social Work Associate Degree Program and in addition to the above mentioned program objectives/competencies:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- 3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Social Work assessment plan is in its first year and is addressed via a plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust cycle that begins every fall term and follows one Social Work cohort from first term through graduation.

# **Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
1. Students will summarize the history of social welfare, past and present.	<ul><li>Tests</li><li>CAT</li><li>Guest speakers</li><li>Research project</li></ul>	• SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104
2. Students will recognize the National Association of Social Workers Code of Ethics and Preamble and discuss steps involved in becoming a member of the national organization.	<ul><li>Tests</li><li>CAT</li><li>Guest speakers</li><li>Research project</li></ul>	• SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104
3. Students will demonstrate effective written and oral communication skills necessary in the field for effective social work practice.	<ul><li>Tests</li><li>CAT</li><li>Guest speakers</li><li>Research project</li></ul>	• SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** Written Exam – SW 218

Program Objective(s): 1, 2, 3

Goal Results: 70% pass rate/ 70% cut score

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	6	6	100%

Measurement Tool: CAT- SW 218

Program Objective(s): 1, 2, 3

**Goal Results:** 100% completion rate;

All students were required to complete the CAT on lectures using Muddiest Point in order to help students with lecture topics that were not quite clear to them. We used as a wrap up at the end of the class period to help them understand better.

Measurement Tool: CAT- Guest speaker SW 218

Program Objective(s): 1, 2, 3

Goal Results: 100% pass rate

The guest speaker paper was graded as an essay paper with one hundred points possible. It was based on the agency and work done at that agency. One student was not present and could not complete the assignment.

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	6	5	83%

Measurement Tool: Research Project-SW 218 topics varied and

were open as long as it was within the

discipline of social work.

Program Objective(s): 1, 2, 3

Goal Results: 100% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	6	6	100%

# **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.

The following <u>Curriculum Map</u> outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication	GEA College Rubric	• ACS 100
Present ideas in	• CAAP	• COM 102
writing.	• CAT	• CIS 101
<ol><li>Present ideas orally</li></ol>	Class Presentation	• ENG 104
according to standard usage.	Class Writing     Assignment	Lab Sciences

3. Demonstrate application of information technology.		• STAT 213 • SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104
Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 104</li> <li>Lab Sciences</li> <li>STAT 213</li> <li>SW 218</li> <li>SW 290</li> <li>SOC 215</li> <li>PSCI 202</li> <li>ECE 104/PSY 104</li> </ul>
<ul> <li>Critical Thinking</li> <li>Read and analyze complex ideas.</li> <li>Locate, evaluate and apply research information.</li> <li>Evaluate and present well-reasoned</li> </ul>	<ul><li>GEA College Rubric</li><li>CAAP</li><li>Class Exercises</li><li>Class Examinations</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 104</li> <li>Lab Sciences</li> <li>STAT 213</li> <li>MATH 110</li> <li>SW 218</li> </ul>
arguments.		• SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104

# **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 1, 2, 3

Goal Results: 100% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	2	2	100%(mean=2.20)
• 2	2	2	100%(mean=2.80)
• 3	2	2	100%(mean=5.00)*

<sup>1</sup> Present ideas in writing.

Measurement Tool: **GEA College Rubric** General Education Objective(s): 4, 5, 6

Goal Results: 100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

# of Students # Passing **Reporting Period** % Passing **Attempting** 2010-2011 2 0 0%(mean=1.50) • 4 2 2 100%(mean=3.87) 2 2 100%(mean=3.75)

**Measurement Tool: GEA College Rubric** General Education Objective(s): Critical Thinking-Science

Evaluation

100% "excellent (4)", "proficient

**Goal Results:** (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	2	2	100%(mean=3.50)
• 8	2	2	100%(mean=3.50)
• 9	2	2	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

**Measurement Tool:** General Education Objective(s): Goal Results:

GEA College Rubric Critical Thinking-English 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>4</sup> Demonstrate mathematical principles.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	2	2	100%(mean=3.00)
• 8	2	2	100%(mean=2.50)
• 9	2	2	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool: ACT Collegiate Assessment of

Academic Proficiency (CAAP)

General Education Objective(s): 1, 4-9
Goal Results: 50%

**Legend:** n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	1(14%)	N/A	1(12%)	1(6%)	1(21%)

# PDSA CYCLE GOALS (2010-2011)

#### **ANALYSIS:**

#### **Problem Area**

Students need more work in writing in the appropriate style according to their discipline. Students should be able to go on to the university level prepared to write at an accelerated pace and level according to their discipline and with an understanding in research.

Another issue is receiving data from Off-Campus programs in order to have a more complete overview and for reporting purposes.

#### Goal

To make sure students can write properly in a social work class and a social work employment environment.

To make sure I data is received on all students at all campuses taking social work courses.

#### **Action Plan**

Bring in documentation templates from different social work agencies to practice the APA (America Psychological Association) style. Require writing assignments using APA (America Psychological Association) style requirements for citations.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

Contact all Social Work Instructors to obtain information on students enrolled in in social work courses.

# Results

To be presented and analyzed in 2011-2012 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT TECHNICAL AND PROFESSIONAL WRITING 2010-2011

The Technical and Professional Writing Occupational Certificate program provides students with a selection of courses designed to enhance professional opportunities in a variety of communication fields. The program is intended to develop written, verbal, and digital communication skills to advance students in their fields of study. Taken alone, the Certificate serves as a basis for entry level positions in administrative or communication industries. Students will participate in a capstone project to create a deliverable product to illustrate their technical and professional communication skills.

# **Program Objectives**

Upon completion of the Technical and Professional Writing Occupational Certificate program:

- 1. The student will write in an academic style (MLA, APA, Chicago) that can be utilized across the curriculum.
- 2. The student will create a comprehensive technical communication project that is measurable by current technical communication standards.
- 3. The student will utilize computer and emerging technology to produce technical communication products that are measurable by current standards.

### Overview

The Technical and Professional Writing assessment plan is in its second year and is addressed via a plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust cycle of assessment that begins every fall term and follows one Technical and Professional Writing cohort from first term through graduation.

# **Program Objectives Assessment Plan**

All program objectives are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

PROGRAM OBJECTIVE	MEASUREMENT TOOLS	COURSES IN WHICH PROGRAM OBJECTIVES ARE PRESENTED AND/OR MEASURED
1. The student will write in an academic style (MLA, APA, Chicago) that can be utilized across the curriculum.	<ul> <li>Formal essays</li> <li>Grant proposals</li> <li>Technical communication projects</li> <li>Pre/Post-Test</li> </ul>	<ul><li>ENG 102</li><li>ENG 104</li><li>ENG 268</li><li>ENG 293</li></ul>
2. The student will create a comprehensive technical communication project that is measurable by current technical communication standards.	<ul> <li>Technical communication projects</li> <li>Capstone project</li> <li>Grant proposal</li> <li>Formal essays</li> </ul>	<ul><li>ENG 168</li><li>ENG 233</li><li>ENG 268</li><li>ENG 293</li></ul>
3. The student will utilize computer and emerging technology to produce technical communication products that are measurable by current standards.	<ul> <li>Technical communication projects</li> <li>Capstone project</li> <li>Formal essays</li> </ul>	<ul><li>ENG 168</li><li>ENG 233</li><li>ENG 293</li></ul>

# **Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

Measurement Tool: Research Project

Program Objective(s): 1, 2, 3,

**Goal Results:** 70% pass rate

Reporting Period	# of students attempting	# passing	% passing
2009-2010	1	1	100% (mean=95%)
2010-2011	1	1	100% (mean=95%)

**Measurement Tool:** Four Technical Communication Projects

Program Objective(s): 1, 2, 3

Goal Results: 70% pass rate

Reporting Period	# of students attempting	# passing	% passing
2009-2010	1	1	100% (mean=92%)
2010-2011	1	1	100% (mean=95%)

Measurement Tool: Grant Proposal

Program Objective(s): 1, 2

Goal Results: 90% "Average" or "Above Average"\*\*

Reporting Period	# students attempting	# passing	% passing
2009-2010	1	1	100% (mean=90%)
2010-2011	N/A		,

Measurement Tool: Writing Across the Curriculum

College Rubric

Program Objective(s): 1, 2, 3

Goal Results: 90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1	8	6	5	
• 1.1.2	8	6	5	
• 1.1.3	8	6	5	
• 1.2.1	7	8	4	
• 1.2.2	7	8	4	
• 1.2.3	7	8	4	
• 1.3.1	8	9		2
• 1.3.2	8	8		2
• 1.4.1	5	11	2	4
• 1.4.2	6	10	3	<b>l</b>

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	6	9	1	
• 1.1.2	6	9	1	
• 1.1.3	6	9		
• 1.2.1	8	7	1	
• 1.2.2	8	7	1	
• 1.2.3	8	7	1	
• 1.3.1	6	9	1	
• 1.3.2	6	9	1	
• 1.4.1	5	9		2
• 1.4.2	9	9		2

Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

1.3.1 Provides relevant outside sources

- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
- 1.4.2 Sentence structure and vocabulary are well developed and varied.

**Measurement Tool: Program Objective(s): Goal Results:** 

Legend:

Critical Thinking College Rubric 90% "Excellent(4)"/"Proficient(3)"/ "Adequate(2)" Laboratory Science(No Lab

Sciences)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 6.1.1	8	3	5	
• 6.1.2	8	3	5	
• 6.1.3	8	3	5	
• 6.2.1	8	3	5	
• 6.2.2	8	3	5	
• 6.2.3	8	3	5	
• 6.3.1	8	3	5	
• 6.3.2	8	3	5	
• 6.3.3	8	3	5	

Identify and gather

6.1.1 Asks insightful questions

6.1.2 Critiques content

6.1.3 Examines inconsistencies

Analyze and evaluate

- 6.2.1 Analyzes and evaluates thoroughly
- 6.2.2 Uses reasonable judgment
- 6.2.3 Critically discriminates between good and bad information

Synthesize and formulate conclusion

- 6.3.1 Discusses issues thoroughly and argues succinctly
- 6.3.2 Assimilates information
- 6.3.3 Justifies conclusion

## PDSA CYCLE RESULTS (2009-2010)

### **ANALYSIS**

### **Problem Area**

This program needs more marketing efforts to improve enrollment. The program should be advertised throughout the state of New Mexico because it is unique to the state.

### Goal

The goal is to market the program in at least three paper or electronic sources in the next year.

### **Action Plan**

The English Instructor will meet with the Public Relations Director to plan marketing strategies after Cabinet has approved.

### Results

The English Instructor met with the Public Relations Director and a flyer for the technical writing certificate was planned and completed. The flyer was posted around the Campus and also distributed to ENG 102, ENG 104, and COM 102 classes. The technical writing certificate was also placed on the Student Information System so that students were made aware of the certificate. Radio announcements concerning the certificate are pending.

## PDSA CYCLE GOALS (2010-2011)

### **ANALYSIS**

### **Problem Area**

Results of the marketing need to be assessed during the 2011-2012 academic year. The English Instructor would like the certificate to be included in two publications for additional marketing efforts.

### Goal

Additional recruiting through advertising in publications is desirable. Consider marketing program to local businesses. The Instructor will also track student enrollment in the certificate.

### **Action Plan**

The English Instructor will meet with the Public Relations Director to plan additional marketing strategies after Cabinet has approved. The Instructor will also track student enrollment in the certificate.

### Results

The results of these goals will be reported in the 2011-2012 plan.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT WIND ENERGY TECHNOLOGY 2010-2011

The Wind Energy Technology program at Mesalands Community College offers training to meet the growing demand for trained and qualified wind energy technicians to provide maintenance on wind turbines. The Associate of Applied Science Degree in Wind Energy Technology provides instruction in wind turbine technology, turbine placement and construction, turbine operations and maintenance, monitoring and communications technology, tower safety mechanical systems, electrical theory, power generation and distribution, hydraulics, and digital electronics. Students in these programs will be prepared for rewarding and profitable careers in this growing field.

### **Program Objectives**

Upon completion of the Wind Energy Technology Associate of Applied Science Degree Program:

- 1. The student will identify electrical, mechanical, and hydraulic components found within various styles and vintages of wind machines, and demonstrate an understanding of their functions and maintenance requirements.
- 2. The student will differentiate between the various workplace positions of wind power facility team members, and describe the duties and responsibilities of each, including those relating to site construction and continuous operation.
- 3. The student will authoritatively discuss the market realities and future potential of wind energy technology and the employment opportunities it represents.
- 4. The student will discuss the basic advantages and disadvantages of modern renewable energy technologies, and compare them to extant non-renewable methods of energy production and conservation.
- 5. The student will demonstrate a functional understanding of numerous electrical concepts and components, including AC/DC theory and its application within electronic subsystems and power generation technologies.
- The student will thoroughly demonstrate a complete understanding of workplace safety concepts and practices within the wind industry, including electrical safety, tool safety, Lock-Out/Tag Out, Personal Protective Equipment selection and use, Adult CPR, and Basic First Aid.

### **General Education Competencies**

Upon completion of the Wind Energy Technology Associate of Applied Science Degree Program and in addition to the above mentioned program objectives:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
- 3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

### **Overview**

The Wind Energy Technology assessment plan is in its second year and is addressed via a plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust assessment cycle that begins every fall term and follows one Wind Energy Technology cohort from first term through graduation.

### **Program Objectives Assessment Plan**

All program objectives are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

Program Objective	Measurement Tools	Courses In Which Program Objectives are Presented and/or Measured
1. The student will identify electrical, mechanical, and hydraulic components found within various styles and vintages of wind machines, and demonstrate an understanding of their functions and maintenance requirements.	<ul> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul> <li>WET 105</li> <li>WET 204</li> <li>WET 121</li> <li>WET 205</li> <li>WET 116</li> </ul>

		<u> </u>	<del></del>
2.	The student will differentiate between the various workplace positions of wind power facility team members, and describe the duties and responsibilities of each, including those relating to site construction and continuous operation.	<ul> <li>Project</li> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul><li>WET 101</li><li>WET 202</li><li>WET 210</li></ul>
3.	The student will authoritatively discuss the market realities and future potential of wind energy technology and the employment opportunities it represents.	<ul> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	• WET 101 • WET 210
4.	The student will discuss the basic advantages and disadvantages of modern renewable energy technologies, and compare them to extant non-renewable methods of energy production and conservation.	<ul> <li>Performance Profile</li> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	• WET 101 • WET 210
5.	The student will demonstrate a functional understanding of numerous electrical concepts and components, including AC/DC theory and its application within electronic subsystems	<ul> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul> <li>WET 105</li> <li>WET 115</li> <li>WET 205</li> <li>WET 116</li> <li>WET 210</li> <li>WET 212</li> <li>WET 215</li> <li>WET 216</li> </ul>

and power generation technologies.		
6. The student will thoroughly demonstrate a complete understanding of workplace safety concepts and practices within the wind industry, including electrical safety, tool safety, Lock-Out/Tag Out, Personal Protective Equipment selection and use, Adult CPR, and Basic First Aid.	<ul> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CAT</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul> <li>AHS 118R</li> <li>WET 105</li> <li>WET 204</li> <li>WET 201</li> <li>WET 205</li> <li>WET 110</li> <li>WET 116</li> <li>WET 212</li> <li>WET 215</li> <li>WET 216</li> <li>WET 140</li> <li>WET 240</li> <li>WET 241</li> </ul>

### **Program Objective Results**

This section presents the raw data results of those measurement tools identified in the second column above.

**Measurement Tool:** Pre/Post Test

Program Objective(s): 1-6

Goal Results: 50% Improvement

**Legend:** Score(n)

Reporting Period/Topic	Pre-Test	Post-Test
2009-2010		
Introduction To Hydraulics	54%(36)	83%(34)
Wind Turbine Mechanical Systems		
Introduction To Wind Energy	63%(36)	85%(34)
Electrical Theory I		
Electrical Theory II		
Field Safety And Experience		
Wind Turbine Operation And Maintenance		
<ul> <li>Introduction to Motors and Generators</li> </ul>		
<ul> <li>Power Generation And Distribution</li> </ul>		
<ul> <li>Wind Turbine Siting And Construction</li> </ul>		
<ul> <li>Monitoring And Communication Technology</li> </ul>		
<ul> <li>Wind Turbine Diagnosis And Repair</li> </ul>		
Digital Electronics		
Reporting Period/Topic	Pre-Test	Post-Test
2010-2011	Pre-Test	Post-Test
2010-2011 • Introduction To Hydraulics	Pre-Test	Post-Test
<ul><li>2010-2011</li><li>Introduction To Hydraulics</li><li>Wind Turbine Mechanical Systems</li></ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> </ul>	Pre-Test	Post-Test
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> </ul>	Pre-Test 36%(24)	Post-Test 85%(24)
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> <li>Monitoring And Communication Technology</li> </ul>		
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> <li>Monitoring And Communication Technology</li> <li>Wind Turbine Diagnosis And Repair</li> </ul>		
<ul> <li>2010-2011</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> <li>Monitoring And Communication Technology</li> </ul>	36%(24)	85%(24)

Research Paper 1, 2, 5, 6 **Measurement Tool:** 

**Program Objective(s):** Goal Results: 70%

%passing (group mean) Legend:

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
<ul><li>2010-2011</li><li>Introduction To Hydraulics</li><li>Wind Turbine Mechanical</li></ul>	26	26	100% (Mean=96%)
Systems	24	24	100% (Mean= 97%)

Later Later Table 1			
Introduction To Wind			
Energy	00	24	000/ (MEANL 700/)
Electrical Theory I	26	24	92% (MEAN=78%)
Electrical Theory II	26	20	77% (MEAN=71%)
Field Safety And			
Experience			
<ul> <li>Wind Turbine Operation</li> </ul>			
And Maintenance			
<ul> <li>Introduction to Motors and</li> </ul>			000( (145 11) 000()
Generators	26	23	88% (MEAN=83%)
<ul> <li>Power Generation And</li> </ul>			
Distribution			
Wind Turbine Siting And			
Construction			
Monitoring And			
Communication			
Technology			
Wind Turbine Diagnosis	24	20	000/ (Magin 000/)
And Repair	24	22	92% (Mean=86%)
Digital Electronics			

Measurement Tool: Curriculum Performance Tests

Program Objective(s): 1-6

Goal Results: 90% pass rate, 70% cut score

**Legend:** %passing (group mean)

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2010-2011			
<ul> <li>Introduction To Hydraulics</li> </ul>	26	26	100% (MEAN=94%)
Wind Turbine Mechanical     Systems	26	26	100% (MEAN=95%)
<ul> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> </ul>	26	26	100% (MEAN=97%)

Wind Turbine Siting And	24	24	100% (MEAN=98%)
Construction			
Monitoring And			
Communication			
Technology			
<ul> <li>Wind Turbine Diagnosis</li> </ul>	24	24	100% (MEAN=99%)
And Repair			
Digital Electronics			

### **General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

General Education Competencies Measurement Tools		Courses In Which General Education Competencies Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CAT</li> <li>Class Presentation</li> <li>Writing Across The Curriculum Rubric</li> <li>Oral Presentation Rubric</li> <li>Critical Thinking Rubric</li> </ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 233</li> <li>ENG 299</li> <li>GEOL 141</li> </ul>
technology.  Quantitative and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Capstone Project</li> <li>Laboratory Exercise</li> <li>Laboratory Report</li> <li>Writing Across The Curriculum Rubric</li> <li>Oral Presentation Rubric</li> <li>Critical Thinking Rubric</li> </ul>	• GEOL 141 • MATH 107 • ENG 299
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Capstone Project</li> <li>Laboratory Exercise</li> <li>Writing Across The Curriculum Rubric</li> </ul>	<ul><li>ACS 100</li><li>ENG 102</li><li>ENG 233</li><li>ENG 299</li><li>GEOL 141</li></ul>

Evaluate and present well-reasoned arguments.	<ul><li>Oral Presentation Rubric</li><li>Critical Thinking Rubric</li></ul>	
	g .	

### **General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

Measurement Tool: Writing Across the Curriculum

College Rubric-Research Paper:

Wind Turbine Mechanical

**Systems** 

General Education Objective(s): 1

Goal Results: 90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1	18(10)			
• 1.1.2	18(10)			
• 1.1.3	18(10)			
• 1.2.1	18(10)			
• 1.2.2	18(10)			
• 1.2.3	18(10)			
• 1.3.1	14(9)			4(1)
• 1.3.2	14(9)			
• 1.4.1	18(10)			
• 1.4.2	18(10)			

Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well-reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
- 1.4.2 Sentence structure and vocabulary are well developed and varied.

**Measurement Tool:** Writing Across the Curriculum

College Rubric: Research Paper

**WET 204 Introduction to Hydraulics** 

General Education Objective(s): **Goal Results:** 

90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	10(16)			
• 1.1.2	10(16)			
• 1.1.3	10(16)			
• 1.2.1	10(16)			
• 1.2.2	10(16)			
• 1.2.3	10(16)			
• 1.3.1	6(10)	3(2)	1(1)	(3)
• 1.3.2	10(13)			(3)
• 1.4.1	9(15)	1		(1)
• 1.4.2	10(16)			

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1	19(9)	(1)	(1)	
• 1.1.2	19(8)	(1)	(1)	
• 1.1.3	19(8)		(1)	
• 1.2.1	19(8)	(1)	(1)	
• 1.2.2	19(10)			
• 1.2.3	19(9)	(1)		
• 1.3.1	16(9)	(1)		
• 1.3.2	16(9)	(1)		
• 1.4.1	17(8)	2(2)		
• 1.4.2	19(9)	(1)		

### Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well-reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well reasoned
  1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed Correctly incorporates outside sources.

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling. 1.4.1 Writing is error free in all categories (sentence structure,

- punctuation, spelling and grammar).

  1.4.2 Sentence structure and vocabulary are well developed and varied.

Measurement Tool: Writing Across the Curriculum

College Rubric: Research Paper WET 210 Wind Turbine Siting

and Construction

General Education Objective(s): Goal Results:

1

90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	20(3)		1	
• 1.1.2	20(3)		1	
• 1.1.3	20(3)		1	
• 1.2.1	20(3)		1	
• 1.2.2	20(3)		1	
• 1.2.3	20(3)		1	
• 1.3.1	16(2)		1	4(1)
• 1.3.2	17(2)			4(1)
• 1.4.1	17(3)	2	1	1
• 1.4.2	21(3)			

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2009-2010				
• 1.1.1	14(2)	(1)		
• 1.1.2	14(2)	(1)		
• 1.1.3	14(2)	(1)		
• 1.2.1	14(2)	(1)		
• 1.2.2	14(2)	(1)		
• 1.2.3	14(2)	(1)		
• 1.3.1	6(1)			8(2)
• 1.3.2	6(1)			
• 1.4.1	14(3)			
• 1.4.2	14(3)			

Provides a clear, concise thesis statement.

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
- 1.4.2 Sentence structure and vocabulary are well developed and varied.

Measurement Tool: Writing Across the Curriculum College

Rubric: Research Paper

**WET 216 Digital Electronics** 

General Education Objective(s):

Goal Results: 90% "Excellent"/"Proficient"/ "Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011	-			•
• 1.1.1	14(2)	6	(1)	1
• 1.1.2	15(1)	4(1)	2(1)	
• 1.1.3	15(1)	3(1)	2	1(1)
• 1.2.1	15(1)	1(1)	5(1)	
• 1.2.2	16(2)	3	1(1)	1
• 1.2.3	16(2)	2	3	(1)
• 1.3.1	18(1)			3(2)
• 1.3.2	17(1)	1		3(2)
• 1.4.1	7(1)	7(1)	5	2(1)
• 1.4.2	13(2)	5	3	(1)

Provides a clear, concise thesis statement

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

### Correctly incorporates outside sources

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well developed and varied

**Measurement Tool:** Writing Across the Curriculum College

Rubric: Research Paper

WET 205 Electrical Theory II

**General Education Objective(s):** 

**Goal Results:** Legend:

90% "Excellent"/"Proficient"/ "Adequate" ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011		_		
• 1.1.1	8(14)	(2)	1	
• 1.1.2	8(9)	(7)	1	
• 1.1.3	3(9)	4(3)	2(3)	(1)
• 1.2.1	6(9)	2(5)	1(2)	
• 1.2.2	7(15)	2	(1)	
• 1.2.3	4(7)	4(6)	1(3)	
• 1.3.1	6(10)	2(1)	(2)	1(3)
• 1.3.2	5(8)	3(4)	(1)	1(3)
• 1.4.1	2(8)	4(8)	3	
• 1.4.2	2(6)	5(10)	2	

Provides a clear, concise thesis statement

## Provides supporting paragraphs which relate to the thesis 1.2.1 Supporting paragraphs are well reasoned

- 1.2.2 Supporting paragraphs clearly relate to the thesis1.2.3 Supporting paragraphs are cohesive and logically developed

- Correctly incorporates outside sources
  1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well developed and varied

<sup>1.1.1</sup> Statement is clear and concise

<sup>1.1.2</sup> Statement is well reasoned

<sup>1.1.3</sup> Statement leads to plentiful additional discussion

Measurement Tool: Writing Across the Curriculum College

Rubric: Research Paper
WET 212 Monitoring and
Communication Technology

General Education Objective(s):

Goal Results:

Legend:

90% "Excellent"/"Proficient"/ "Adequate" ENG 102(No ENG 102)

Year	Excellent	Proficient	Adequate	Inadequate
	(4)	(3)	(2)	(1)
2010-2011				
• 1.1.1	16(1)	4(1)	1(1)	
• 1.1.2	18(1)	2(1)	1	(1)
• 1.1.3	18(2)	2		1(1)
• 1.2.1	14(1)	6(1)		1(1)
• 1.2.2	18(1)	2(1)	1	(1)
• 1.2.3	18(1)	2(1)	(1)	1
• 1.3.1	20(3)			1
• 1.3.2	19(2)	1		1(1)
• 1.4.1	4(1)	9	7(1)	1(1)
• 1.4.2	14(1)	4(1)	2	1(1)

Provides a clear, concise thesis statement

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis

- 1.2.1 Supporting paragraphs are well reasoned
- 1.2.2 Supporting paragraphs clearly relate to the thesis
- 1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources

- 1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well developed and varied

**Measurement Tool:** Writing Across the Curriculum College

Rubric: Research Paper

**WET 215 Wind Turbine Diagnosis** 

and Repair

General Education Objective(s): **Goal Results:** 

Legend:

90% "Excellent"/"Proficient"/ "Adequate" ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	15(2)	6(1)		
• 1.1.2	14(3)	7		
• 1.1.3	15(2)	6(1)		
• 1.2.1	18(2)	2(1)	1	
• 1.2.2	16(3)	3	2	
• 1.2.3	13(2)	7(1)	1	
• 1.3.1	16(1)	3(1)	1	1(1)
• 1.3.2	16(1)	3	1(1)	1(1)
• 1.4.1	10(1)	7(2)	4	
• 1.4.2	12(1)	7(1)	2(1)	

Provides a clear, concise thesis statement

- 1.1.1 Statement is clear and concise
- 1.1.2 Statement is well reasoned
- 1.1.3 Statement leads to plentiful additional discussion

## Provides supporting paragraphs which relate to the thesis 1.2.1 Supporting paragraphs are well reasoned

- 1.2.2 Supporting paragraphs clearly relate to the thesis1.2.3 Supporting paragraphs are cohesive and logically developed

- Correctly incorporates outside sources
  1.3.1 Provides relevant outside sources
- 1.3.2 Cites outside sources correctly

- 1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar)
- 1.4.2 Sentence structure and vocabulary are well developed and varied

**Measurement Tool: GEA College Rubric General Education Objective(s):** 1, 2, 3 **Goal Results:** 

100% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	21	19	90%(mean=2.20)
• 2	22	20	91%(mean=2.83)
• 3	21	14	67%(mean=3.88)*
2009-2010			
• 1	21	16	76%(mean=3.09)
• 2	21	21	100%(mean=2.99)
• 3	21	13	62%(mean=4.52)*

<sup>1</sup> Present ideas in writing.

**Measurement Tool: GEA College Rubric** 

**General Education Objective(s):** 4, 5, 6

100% "excellent (5)", "proficient **Goal Results:** 

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	21	5	24%(mean=1.53)
• 5	21	18	86%(mean=2.88)
• 6	21	17	81%(mean=2.83)
2009-2010			
• 4	20	6	30% (mean=1.55)
• 5	21	12	57%(mean=2.94)
• 6	21	11	52%(mean=2.78)

<sup>4</sup> Demonstrate mathematical principles. 5 Demonstrate scientific reasoning.

**Goal Results:** 

**Measurement Tool:** GEA College Rubric Critical Thinking-Science **General Education Objective(s):** 

Evaluation

100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>6</sup> Apply scientific methods to the inquiry process.

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	21	20	95%(mean=2.95)
• 8	21	19	90%(mean=3.05)
• 9	21	19	90%(mean=2.76)

<sup>7.</sup> Identify and gather information.

Measurement Tool:GEA College RubricGeneral Education Objective(s):Critical Thinking-English

Evaluation

Goal Results: 100% "excellent (4)", "proficient

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	22	22	100%(mean=2.95)
• 8	22	22	100%(mean=3.0)
• 9	22	22	100%(mean=2.91)

<sup>7.</sup> Identify and gather information.

Measurement Tool: GEA College Rubric

**General Education Objective(s):** 7, 8, 9

Goal Results: 100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 7	20	11	55%(mean=2.84)
• 8	21	8	38%(mean=2.67)
• 9	20	17	85%(mean=3.36)

<sup>7.</sup> Read and analyze complex ideas.

Measurement Tool: ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9 **Goal Results:** 50%

**Legend:** n (Mean Score)

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments.

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	22(44.7%)	3(75.7%)	22(58.8%)	22(51.5%)	22(50%)
2009-2010	12(35.0%)	1(90%)	13(49.6%)	18(41.5%)	17(54.8%)

## PDSA CYCLE RESULTS (2009-2010)

### **ANALYSIS**

### **Problem Area**

Program objectives 1, 4, and 5 suffered in the 2009-2010 semesters due to a lack of educational material related specifically to Wind Energy Technology.

### Goal

The goal for 2010-2011 academic year is to provide students with current and specific educational material related to Wind Energy Technology.

### **Action Plan**

The plan of action is to review available material and purchase material specific to Wind Energy Technology.

### Results

A review of the problem areas in objectives 1, 4, and 5 revealed the particular needs of current and specific educational material for the Wind Energy Technology program. A curriculum reconstruction was determined. Curriculum mapping was performed. Revamping was needed through the program curriculum. After review of possible textbooks, new textbooks were selected. Lesson plans, lab activities and syllabi are being revised to enhance the new material. The reconstruction will meet wind industry skill standards and a seal of approval from the American Wind Energy Association.

### PDSA CYCLE GOALS (2010-2011)

### **ANALYSIS**

### **Problem Area**

Program objectives 1, 4, and 5 suffered in the 2010-2011 semesters due to a lack of balance between the classroom lectures and lab educational material.

Program objectives 2 and 3 experienced issues in 2010-2011 semesters due to a disconnection between education and real world activities.

Program objective 6 in 2010-2011 semesters encountered a deficient usage of the wind turbine for safety scenarios.

### Goal

The goal is to provide students with balance between the classroom lectures and lab educational material.

The goal is to provide students with a connection between education and real world activities.

The goal is to provide students using the wind turbine for safety scenarios.

### **Action Plan**

The plan of action for program objectives 1, 4, and 5 is to evaluate each course in the Wind Energy Technology program. Restructure all courses which display an unbalance of classroom and lab material. Design a well balanced class and lab instruction.

The plan of action for program objectives 2 and 3 is to assign a project in which the students will link college education to real world wind industry.

The plan of action for program objective 6 is to have each student involved in a simulated emergency scenario with the actually wind turbine.

### **Results**

To be presented and analyzed in 2011-2012 report.

## ASSESSING PROGRAM ASSESSMENT 2010-2011

Assessment can be defined as the process of determining the quality and quantity of student learning in order to make improvements (Bordon and Zak, 2001). It is critical that faculty members at Mesalands Community College meaningfully capture and document what they are teaching, what students are learning and how this information ultimately improves the teaching-learning relationship. To that end, Mesalands Community College encourages faculty to take "ownership" of their respective programs and courses in terms of whether or not students are learning what faculty say they are learning as identified in the course objectives, program objectives and general education competencies. Effective assessment of student learning is a matter of commitment, not a matter of compliance. Mesalands Community College is dedicated to establishing a culture of assessment embedded in every aspect of the educational process.

In order to improve the plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust cycle of program assessment at the College, the Student Learning Assessment Committee (SLAC) assesses program assessment on an annual basis. The goals of assessing the assessment are twofold. First, this report will give feedback to the faculty as to how they are doing in terms of assessment with the goal of helping them to continually improve the teaching-learning relationship both inside and outside the classroom. Second, this report will help the College identify how it is doing in terms of its own assessment efforts with the goal of attentively reshaping and meaningfully improving the continual process of student learning and assessment.

This report focuses on how well programs are assessing both program objectives and general education competencies. Degree and certificate programs are required to complete a standardized report format documenting their annual assessment activities. Lead faculty and program directors are encouraged to modify their reports so as to better meet the individual needs and characteristics of their programs and make the report more meaningful to all stakeholders. These reports are then reviewed by the Chair of the Student Learning Assessment Committee who uses the Student Learning Assessment Program Report Evaluation Rubric to evaluate each program report. Results of this evaluation are shared with the College during the August Assessment Day.

Generally speaking, SLAC would like to see a migration of programs from the left hand columns of the following rubrics to the right hand columns indicating more comprehensive and meaningful assessment efforts. It is SLAC's goal to facilitate this migration.

### **MEASURES PROGRAM OBJECTIVES\***

1	2	3	4
No program objectives measured	Some program objectives measured (<50%)	Most program objectives measured (<100%)	Measures all program objectives
Fine Arts (4)		Natural Sciences (2) Wind Energy Technology (2)	Animal Science (2) Automotive Technology (3) Building Trades (S) Business Administration (S) Business Office Technology (S) Diesel Technology (S) Early Childhood (S) Farrier Science (S) Professional Writing (S) Social Work (N)

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

### **USES MULTIPLE MEASURES: PROGRAM OBJECTIVES\***

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Fine Arts (2)	Business Administration (S) Business Office Technology (S) Farrier Science (3)	Animal Science (S) Early Childhood (S) Natural Science (2) Wind Energy Technology (2)	Automotive Technology (3) Building Trades (S) Diesel Technology (3) Professional Writing (3) Social Work (N)

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

1 No General Education Competency: Communication-Writing measured	2	3	4 General Education Competency: Communication-Writing measured
AA General Studies (S) AAS General Studies (S)			Animal Science (1) Automotive Technology (1)
Building Trades (S)			Diesel Technology (1)
Business Administration (4)			Early Childhood (S)
Business Office Technology (4)			Farrier Science (1)
Natural Sciences (S)			Fine Arts (S)
Pre-Nursing (N)			Wind Energy Technology (S)
Social Work (N)			
University Studies (S)			

Critical Thinking\*\*

1 No General Education Competency: Critical Thinking measured	2	3	4 General Education Competency: Critical Thinking measured
AA General Studies (N) AAS General Studies (N)			Animal Science (N) Farrier Science (N)
Automotive Technology (N) Building Trades (N)			Social Work (N)
Business Administration (N) Business Office Technology (N)			
Diesel Technology (N) Early Childhood (N)			
Fine Arts (N) Natural Sciences (N)			
Pre-Nursing (N) University Studies (N)			
Wind Energy Technology (N)			

### Communication-Oral Presentation\*\*

1 No General Education Competency: Communication-Oral Presentation measured	2	3	4 General Education Competency: Communication-Oral Presentation measured
AA General Studies (N) AAS General Studies (N) Animal Science (N) Building Trades (N) Business Administration (N) Business Office Technology (N) Fine Arts (N) Pre-Nursing (N) Social Work (N) University Studies (N) Wind Energy Technology (N)			Automotive Technology (N) Diesel Technology (N) Early Childhood (N) Farrier Science (N) Natural Sciences (N)

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

<sup>\*\*</sup>Based on the General Education Competency Reporting Schedule.

### **USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY: COMMUNICATION\***

Writing

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Building Trades (3)	AA General Studies (3) Business Office Technology (4) Fine Arts (3)	AAS General Studies (S) Business Administration (4) Early Childhood (4) Natural Sciences (S) Pre-Nursing (N) Social Work (N) University Studies (S)	Animal Science (3) Automotive Technology (2) Diesel Technolgy (1) Farrier Science (3) Wind Energy Technology (S)

### Oral Presentation

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Building Trades (N) Business Office Technology (N) Fine Arts (N)	AA General Studies (N) AAS General Studies (N) Animal Science (N) Business Administration (N) Early Childhood (N) Social Work (N) University Studies (N) Wind Energy Technology (N)	Automotive Technology (N) Diesel Technology (N) Farrier Science (N) Natural Sciences (N)	

Information Technology

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Building Trades (N) Business Office Technology (N) Early Childhood (N) Fine Arts (N)	AA General Studies (N) AAS General Studies (N) Animal Science (N) Automotive Technology (N) Business Administration (N) Diesel Technology (N) Farrier Science (N) Natural Sciences (N) Pre-Nursing (N) Social Work (N) University Studies (N) Wind Energy Technology (N)		

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

## USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY: MATHEMATICAL AND SCIENTIFIC REASONING\*

Mathematical Reasoning

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Building Trades (3) Business Office Technology (2) Early Childhood (2) Fine Arts (3)	AA General Studies (3) AAS General Studies (S) Automotive Technology (S) Diesel Technology (1) Farrier Science (S) Social Work (N)	Animal Science (S) Business Administration (S) Natural Sciences (S) Pre-Nursing (N) University Studies (S) Wind Energy Technology (S)	

Scientific Reasoning

1 No measures	2 One (1) measure	3 Two (2) measures	4 Three (3(triangulation)) or more measures
Building Trades (3)	AA General Studies (3)	Animal Science (S)	
Fine Arts (3)	AAS General Studies (S)	Automotive Technology (2)	
	Business Office Technology (S)	Business Administration (S)	
	Early Childhood (S)	Diesel Technology (1)	
		Farrier Science (2)	
		Natural Sciences (S)	
		Pre-Nursing (N)	
		Social Work (N)	
		University Studies (S)	
		Wind Energy Technology (S)	

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

## USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY: CRITICAL THINKING\*

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
AA General Studies (3) Building Trades (3) Fine Arts (2)	Business Office Technology (3) Early Childhood (3)	Natural Sciences (S)	AAS General Studies (3) Animal Science (3) Automotive Technology (2) Business Administration (3) Diesel Technology (1) Farrier Science (3) Pre-Nursing (N) Social Work (N) University Studies (3) Wind Energy Technology (3)

\*The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

### **USES BOTH INTERNAL AND EXTERNAL SOURCES\***

1 No data	2	3 Uses either internal data or external data	4 Uses both internal data and external data
		AA General Studies (S) AAS General Studies (S) Animal Science (S) Automotive Technology (S) Business Administration (S) Business Office Technology (S) Building Trades (S) Diesel Technology (S) Early Childhood (S) Fine Arts (S) Natural Sciences (S) Pre-Nursing (S) Professional Writing (S) Social Work (N) University Studies (S) Wind Energy Technology (S)	Farrier Science (3)

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

### **HAS COMPLETE DATA SUMMARY\***

1 No data summary	2 Minimal summary explaining little data	3 Partial summary explaining some data	4 Full data summary explaining who, what, where, when, how, why and to what extent
AA General Studies (3) AAS General Studies (3) Building Trades (3) Natural Sciences (3) Pre-Nursing (N) University Studies (3)	Animal Science (S) Automotive Technology (S) Business Office Technology (3) Diesel Technology (S) Fine Arts (3) Professional Writing (S)	Business Administration (S) Early Childhood (S) Farrier Science (2) Social Work (N) Wind Energy Technology (S)	

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

## CHANGES TO CURRICULUM BASED ON DATA (CLOSES THE LOOP)\*

1 No changes made	2 Changes made without data/changes based on anecdotal data	3 Changes made based on empirical data	4 Changes made based on empirical data with follow-up plans to measure effectiveness
AA General Studies (3) AAS General Studies (3) Building Trades (3) University Studies (3)	Animal Science (S) Automotive Technology (S) Business Office Technology (3) Diesel Technology (S) Early Childhood (4) Fine Arts (S) Pre-Nursing (N) Professional Writing (3) Social Work (N) Wind Energy Technology (S)	Business Administration (S) Early Childhood (4) Farrier Science (2)	Natural Sciences (3)

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

## 210-2011 Studelit Lealillily Assessifierit Collillittee Affilial Report - 2

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT EVALUATION RUBRIC MESALANDS COMMUNITY COLLEGE

Evaluation Criteria	1	2	3	4
Measures Program Objectives	No program objectives measured.	Some program objectives measured. (<50%)	Most program objectives measured. (<100%)	All program objectives measured.
Uses Multiple Measures: Program Objectives	No measures.	One measure.	Two measures.	Three (triangulation) or more measures.
Measures General Education Competencies*	Not measured			Measured
Uses Multiple Measures- General Education Competency: Communication (Writing, Oral Presentation, Information Technology)	No measures.	One measure.	Two measures.	. Three (triangulation) or more measures.
Uses Multiple Measures- General Education Competency: Mathematical and Scientific Reasoning	No measures.	One measure.	Two measures.	Three (triangulation) or more measures.
Uses Multiple Measures- General Education Competency: Critical Thinking	No measures.	One measure.	Two measures.	Three (triangulation) or more measures.
Uses Both Internal and External Sources	No data.		Uses either internal data or external data.	Uses both internal data and external data.
Has Complete Data Summary	No data summary.	Minimal summary explaining little data.	Partial summary explaining some data.	Full data summary explaining who, what, where, when, how, why and to what extent.
Changes to Curriculum Based on Data (Closes the Loop)	No changes made.	Changes made without data/changes based on anecdotal data.	Changes made based on empirical data.	Changes made based on empirical data with follow-up plans to measure effectiveness.

<sup>\*</sup>As identified on the General Education Competency Reporting Schedule.

## PDSA CYCLE GOALS (2009-2010)

### **ANALYSIS**

### **Problem Area**

Despite implementation of the Writing Across the Curriculum plan and collection of the data, very few programs reported data specific to their plan of study students.

### Goal

One hundred percent of programs will report on the general education competency of writing utilizing the Writing Across the Curriculum rubric.

### **Action Plan**

Lead instructors/program directors will be required to keep hard copies of their results as documented on the Writing Across the Curriculum rubric and to report this data using a standardized report format. Note: Faculty did submit assessment results on the general education competency of writing utilizing the Writing Across the Curriculum rubric. This data was reported for the entire College but not broken down program-specifically.

### Results

Only 44% of programs (7 out of 16) reported program-specific Writing Across the Curriculum (WAC) data in their Student Learning Assessment Program Reports. This is difficult to explain since all faculty at the College are required to participate in the WAC initiative. A general education competency writing rubric was developed in order to facilitate the data collection in support of the WAC initiative.

### **ANALYSIS**

### **Problem Area**

Assessment of the general education competencies – critical thinking will be implemented during the Spring 2011 semester. This data will be collected both at a College-wide and program level.

### Goal

One hundred percent of programs will report on the general education competency – critical thinking utilizing the specific rubric that will be created during the Fall 2010 semester.

### **Action Plan**

The Student Learning Assessment Committee will be responsible for creating the rubric as well as "rolling out" this plan to all full-time and adjunct faculty.

### Results

Only 12% of programs (2 of 16) reported program-specific data on critical thinking competency attainment. After this goal was established, the SLAC decided to allow all faculty to assess either the general education competencies of critical thinking or oral presentation. Thirty-one percent (5 of 16) of programs reported oral presentation competency attainment. Having said that, only 44% of programs (7 of 16) reported program specific data on either critical thinking or oral presentation competency attainment in their Student Learning Assessment Reports.

### CLASSROOM LEVEL ASSESSMENT

The goal of faculty assessment of student leaning at the individual course level is to identify what has and has not worked at increasing learning in the classroom and how this information can be used in present and future classes to improve the teaching-learning relationship between faculty and students. Historically, Mesalands Community College required all faculty to complete a Faculty Outcomes Assessment Form. This form was the College's attempt to collect quantitative data regarding the students' performance on the courses' identified learning outcomes, i.e., course objectives.

The Faculty Outcomes Assessment Form was not well received by faculty. Faculty indicated that the Form was too time consuming to fill out while the information they were required to supply did not lead to improved student learning. Based on this feedback, the SLAC redesigned the Form to make it more user friendly, as well as provide more useful information that could be used to improve student learning, regardless of who was teaching the course in question. The new MCC Faculty Outcomes Assessment Narrative Form asks three questions:

- 1. Comment on any strategies you used in the course that improved student learning.
- 2. Comment on anything that was not successful in meeting your learning objectives.
- 3. What changes to this course would you recommend for yourself or another instructor to improve student learning the next time this course is offered?

A hard copy of this form will be kept on file and is available to all College faculty teaching that specific course. The availability of these forms is identified in the "Student Learning Assessment Guide for Faculty." Faculty are encouraged to review the information on these Forms with the goal of assisting them at improving student learning.

Faculty complete the Mesalands Community College Faculty Outcomes Assessment Narrative Form for each class they teach at the completion of the fall, spring and summer semesters.